

**An Exploratory Study of the Factors Affecting Food
Access and Food Choice of Consumers in Remote
Scottish Communities**

Laura Nisbet

PhD

The University of Edinburgh

2009



ABSTRACT

This thesis aims to explore how food access impacts on consumer perceptions in relation to food choices and enhance our current understanding of how consumers use their food retail environment (Broadbridge and Calderwood, 2003; Ruston, 2002). It aims to understand what contribution food access makes to consumer food choices and their perceived access to healthy foods. Previous research has suggested consumers utilise coping mechanisms in order to manage food access issues (Furey et al, 2001; McKie, 1998; Whelan et al, 2002; Wrigley, 2004) and this thesis will describe the mechanisms used within this area and identify other factors which are relevant to consumer food choice.

Fifty six semi-structured interviews were conducted to gather in depth information of the consumers' experience of food shopping in this area. Qualitative interviewing was used to explore individuals' perceptions of and the meanings they attribute to their shopping experiences and of local retail provision, as they are said to be a way of exploring relationships and is a way of uncovering and exploring the meanings that underpin people's lives, routines, behaviours, feelings etc (Rubin and Rubin, 1995). Participants were also asked to complete a 7-day shopping diary (n=40), a cupboard survey (n=56) and Food Frequency Questionnaires (n=45). They provided a behavioural context within which to explore the experiences and motivations for shopping.

Remote consumers appear to have lower expectations of retail choices due to the geographical areas in which they live and the difficulties retailers face with a limited customer base. Differences in perceptions of retail food provision reflect the nature of the retail structure of an area with the presence of a large store resulting in a more favourable perception of provision. Local shops and producers play a crucial role in the community providing flexibility in ordering, delivery and supply of produce to islanders increasing options in terms of variety, quality and convenience.

Consumers' perceptions of food retail provision in this research support previous suggestions of disparities in provision within rural communities (McKie et al, 1996; Furey et al, 2001). However, a number of islanders have devised ways to overcome these disparities that utilise alternative food networks and draw on household and community networks to increase their choice.

Alternative food networks such as local produce sales, farmers markets and home produced food were used in conjunction with the conventional food retail supply chain in order to meet the needs of participants. Many consumers use a variety of mechanisms and strategies to adapt to the unreliable food supply that they associate with the retail food system, for example growing their own vegetables and using food for barter. In this way food becomes embedded in household and community life.

There is as yet no agreed definition of what constitutes adequate access. For participants in these remote communities adequate access means being able travel to a store, even if this means travelling a relatively long distance, which has a consistent range of produce providing choice, variety and quality at all times.

DECLARATION

This thesis is my own work and has been completed entirely by me.

Laura Nisbet

TABLE OF CONTENTS

List of Figures	xii
List of Maps	xiii
List of Tables	xiv
List of Abbreviations.....	xv
Acknowledgements	xvi

SECTION ONE: BACKGROUND

CHAPTER ONE INTRODUCTION

1.1 Introduction to Thesis	1
1.2 Genesis of Research.....	2
1.3 Research Design	4
1.4 Structure of Thesis	5

CHAPTER TWO REVIEW OF THE LITERATURE

2.1 Introduction	10
2.2 Background	10
2.2.1 Diet and Health Policy	10
2.2.2 Diet and Health Inequalities	13
2.3 Defining Food Access	15
2.4 National Issues	17
2.4.1 Food Poverty and Food Security	17
2.4.2 Relative Poverty – Adequate Income?	18
2.4.3 Retail Planning and Location.....	21
2.4.4 Transport	24
2.4.5 What is the optimum retail mix?	25
2.4.6 Food Industry/ Agriculture Systems	26

2.5	Local Issues.....	28
2.5.1	Location of Stores	30
2.5.2	Range of Stock	31
2.5.3	Price and Quality	32
2.5.4	Rural/ Remote Retail Environment	34
2.5.5	Food Initiatives	37
2.6	Individual Issues	37
2.6.1	Economic	37
2.6.2	Gender Roles	39
2.6.3	Cooking/ Preparing Food	40
2.6.4	Culture/ Habit	41
2.6.5	Transport	43
2.6.6	Rural/ Remote Consumer.....	46
2.7	Consumer.....	48
2.7.1	Shopping Patterns.....	48
2.7.2	Types of Shoppers.....	50
2.7.3	Store Choice, Food Choice	51
2.8	Coping Mechanisms.....	53
2.8.1	Introduction	53
2.8.2	Shopping Behaviour.....	53
2.8.3	Alternative Food Networks.....	55
2.8.4	Sharing Food.....	56
2.8.5	Barter.....	57
2.9	Conclusions.....	58

CHAPTER 3 RESEARCH METHODOLOGY

3.1	Introduction.....	59
3.2	Research Objectives.....	59
3.3	Philosophy of Research	62
3.4	Time Frame for Study.....	63
3.5	Sampling.....	66

3.6	Insider/ Outsider Issues.....	68
3.7	Recruitment.....	69
	3.7.1 Phase 1.....	70
	3.7.2 Phase 2	72
	3.7.3 Recruitment Difficulties and Managing Participants	69
3.8	Research Methods	74
3.9	Data Collection Methods	75
	3.9.1 Focus Group	76
	3.9.1.1 Potential drawbacks of focus group	77
	3.9.1.2 Recruiting for focus group	78
	3.9.2 Semi-Structured Interviews	79
	3.9.3 Shopping Diaries	80
	3.9.4 Cupboard Surveys	81
	3.9.5 Food Frequency Questionnaires	82
3.10	Data Collection Procedures	83
	3.10.1 Data Collection	84
	3.10.2 Consent	85
	3.10.3 Focus Group	85
	3.10.4 Interviews	86
	3.10.5 Cupboard Survey and Food Frequency Questionnaire...	88
3.11	Response Rate	88
3.12	Analysis	90
	3.12.1 Focus Group	90
	3.12.2 Interviews	91
	3.12.3 Cupboard Surveys and Shopping Diaries	93
	3.12.4 Food Frequency Questionnaires	94
3.13	Sample Demographics.....	94
	3.13.1 Gender.....	94
	3.13.2 Number in Household.....	95

3.13.3 Age Group.....	95
3.13.4 Household Composition.....	95
3.13.5 Living Arrangements.....	96
3.13.6 Employment Status.....	97
3.13.7 Education.....	98
3.13.8 Islander/ Incomer.....	98
3.13.9 Access to Car.....	98
3.14 Conclusions	99

SECTION TWO: INTERVIEW FINDINGS

CHAPTER FOUR FOOD RETAIL PROVISION & ACCESS TO STORES

RETAIL PROVISION

4.1 Introduction.....	100
4.2 Perceptions of Retail Provision.....	100
4.2.1 Retail Mix	105
4.3 Perceptions of Different Store Types	107
4.3.1 Large General Food Store (LGS)	108
4.3.2 Medium General Food Store (MGS)	109
4.3.3 Small Chain Stores (SCS)	114
4.3.4 Small Independent Stores (SIS)	118
4.3.5 Community Co-ops	122
4.4 Summary	124

ACCESSING STORES

4.6 Introduction	124
4.7 Transport	125

4.7.1 Public Transport	125
4.7.2 Travel costs associated with food shopping	131
4.8 Difficulties Getting to Store	133
4.9 Social Networks	136
4.10 Time Constraints	138
4.10.1 'Shopping Days'	138
4.10.2 Work Patterns	140
4.10.3 Opening Hours/ Mobile Service Routes	142
4.11 Parking	144
4.12 Conclusions	146

CHAPTER FIVE STORE CHOICE, IN STORE AVAIABLITY AND FOOD CHOICE

STORE CHOICE

5.1 Introduction	148
5.2 Consumer choice	148
5.2.1 Household preferences habits and traditions	148
5.2.2 Quality and freshness	151
5.3 Economic Considerations	152
5.3.1 Prices in store	152
5.3.2 Dividend	154
5.4 Practical Considerations	155
5.4.1 Convenience	156
5.4.2 Accessing Stores	158
5.4.3 Restricted range of produce in Store	159
5.4.4 Variety and Selection	160
5.5 Moral and Ethical Considerations	161
5.5.1 Supporting local business	161
5.5.2 Ethical Shoppers	163

5.6	Summary	163
-----	---------------	-----

IN STORE AVAILABILITY AND FOOD CHOICE

5.7	Introduction	164
5.8	Range and Variety	164
	5.8.1 Accessibility of Products	169
	5.8.2 Inconsistent availability in Store	173
5.9	Quality	176
5.10	Stocking Patterns	178
5.11	Conclusions	181

CHAPTER SIX SHOPPING BEHAVIOUR & ADAPTING TO RETAIL ENVIRONMENT

SHOPPING BEHAVIOUR

6.1	Introduction.....	182
6.2	Shopping Routine	182
6.3	Planning	183
	6.3.1 Shopping Lists.....	184
	6.3.2 Household Composition/ Preferences	186
6.4	In Store	188
	6.4.1 Store Layout	190
	6.4.2 Stock in Store	192
	6.4.3 Offers	194
	6.4.4 Habit/ Traditional Meals	196
	6.4.5 Purchase Limited Items in Stores	197
6.5	After Shopping In Store	198
	6.5.1 Trip Home/Final Mile	198
6.6	Storage in the Home	199

6.6.1 Preserving Vegetables	201
6.7 Cooking Skills	202
6.8 Summary	204

ADAPTING SHOPPING BEHAVIOUR

6.9 Utilizing Produce Available & Managing Inconsistent Supply...	204
6.10 Local Produce.....	206
6.11 Mainland Shopping	208
6.12 Stocking Up.....	210
6.13 Summary.....	211

USING LOCAL RETAILERS

6.14 Introduction.....	211
6.15 Special Orders.....	212
6.16 Alternative Distribution.....	215
6.17 Retailer Initiative.....	217
6.18 Summary.....	217

ALTERNATIVE FOOD NETWORKS

6.19 Introduction.....	218
6.20 Local Producers Sales.....	218
6.21 Buying Direct from Producer.....	220
6.22 Producing/ Growing Own.....	222
6.23 Hunting/ Gathering/ Fishing Locally.....	225
6.24 Sharing/ Gifting Food.....	226
6.25 Barter.....	229
6.26 Knowledge and Skills.....	230
6.27 Why are these Alternative Networks Used?.....	231

6.27.1	Supporting local producers.....	231
6.27.2	Desire to eat local food.....	231
6.27.3	Quality, taste and value.....	232
6.27.4	Traditional.....	233
6.27.5	Increase availability.....	233
6.27.6	Health.....	234
6.28	Barriers to using Alternative Food Networks.....	235
6.28.1	Access.....	235
6.28.2	Health.....	236
6.28.3	Land availability.....	236
6.28.4	Difficulties growing vegetables.....	237
6.29	Conclusions.....	238

SECTION THREE: SUPPLEMENTARY SURVEYS

CHAPTER SEVEN SHOPPING DIARIES

7.1	Introduction.....	240
7.2	Shopping Occasions.....	240
	7.2.1 Shopping purpose.....	241
	7.2.2 North/ South Comparison of Shopping Purpose.....	242
7.3	Store Choice.....	244
	7.3.1 North/ South Comparison of Store Choice.....	245
	7.3.2 Store Choice for Shopping Purpose.....	246
	7.3.3 North/ South Comparison of Store Choice for Shopping Purpose.....	247
7.4	Shopping Patterns.....	248
	7.4.1 Day of week chosen for shopping.....	249
	7.4.2 North/ South comparison of shopping patterns.....	249
	7.4.3 Choice of shopping day and work commitments.....	250
	7.4.4 Shopping times.....	251
7.5	Transport.....	252
	7.5.1 Mode of transport for shopping purpose.....	252
	7.5.2 Distance travelled to shop.....	253
	7.5.3 Distance travelled for shopping purpose.....	254
	7.5.4 North/ South comparison of distance travelled for shopping purpose.....	255
	7.5.5 Travel time.....	256
	7.5.6 Comparison of travel time in North and South.....	256
7.6	Shopping Spend.....	256
7.7	Joint Trip Shopping.....	257
7.8	Conclusions.	258

CHAPTER EIGHT CUPBOARD SURVEYS

8.1	Introduction.....	259
8.2	Fruit Stocked in the Home.....	259
8.3	Vegetables Stocked in the Home.....	261
8.4	Carbohydrates Stocked in the Home.....	263
8.5	Meals Stocked in the Home.....	264
8.6	Protein Stocked in the Home.....	265
8.7	Dairy Stocked in the Home.....	266
8.8	Conclusions.....	267

CHAPTER NINE FOOD FREQUENCY QUESTIONNAIRES

9.1	Introduction	268
9.2	Findings.....	268
9.3	Protein.....	270
9.4	Fat.....	271
9.5	Carbohydrate.....	272
9.6	Fruit and Vegetables.....	272
9.7	Fish.....	273
9.8	Conclusions.....	274

SECTION FOUR: CONCLUSIONS

CHAPTER TEN CONCLUSIONS

10.1	Introduction	276
10.2	Retail Provision	276
10.3	Access.....	279
10.4	Availability	281

10.5	Food Shopping.....	282
10.6	Alternative Food Networks.....	283
10.7	Health.....	286
10.8	Sustainability.....	287
10.9	Fish.....	288
10.10	Location Specific Solutions.....	289
10.11	Contribution of Research.....	290
10.12	Limitations of Study and Areas for Future Research.....	292
 BIBLIOGRAPHY.....		 294
APPENDIX 1.....		324
APPENDIX 2.....		325
APPENDIX 3.....		326
APPENDIX 4.....		327
APPENDIX 5.....		328
APPENDIX 6.....		329
APPENDIX 7.....		330
APPENDIX 8.....		331
APPENDIX 9.....		332
APPENDIX 10.....		335

LIST OF FIGURES

Figure 1.1	Structure of thesis.....	6
Figure 3.1	Example of tree node with parent and child nodes.....	92
Figure 3.2	Graph – Age group of those with access to a car.....	99
Figure 7.1	Purpose of shopping occasion.....	241
Figure 7.2	Day of the week shopping carried out.....	249
Figure 7.3	Percentage of shopping trips carried out by each mode of Transport.....	252
Figure 7.4	Type of shopping trip	258
Figure 9.1	Box plots of samples nutrient intakes	270

LIST OF MAPS

Map 3.1	Map of Scotland showing position of the Western Isles.....	64
Map 3.2	Western Isles showing main roads, population density and store type/ location.....	66

LIST OF TABLES

Table 3.1	Island population.....	65
Table 3.2	Target population – Interviews.....	69
Table 3.3	Target population – Focus group.....	70
Table 3.4	Phase 1, Recruitment, response and referral	72
Table 3.5	Phase 2, Recruitment , response and referral	73
Table 3.6	Research methods.....	76
Table 3.7	Data collection methods and response.....	84
Table 3.8	Phase 1 – Response rate.....	89
Table 3.9	Phase 2 – Response rate.....	90
Table 3.10	Number of People in sample households.....	95
Table 3.11	Age group of sample.....	95
Table 3.12	Household composition of the sample.....	95
Table 3.13	Marital status of the sample.....	97
Table 3.14	Employment status of the sample.....	97
Table 3.15	Educational attainment of sample.....	98
Table 7.1	North/ South comparison of shopping purpose.....	242
Table 7.2	Store type used for shopping trips/ occasion/ purpose.....	242
Table 7.3	North/ South comparison – no. of shopping trips during 7 Days.....	248
Table 7.4	North/ South differences in shopping day/ purpose.....	250
Table 7.5	Percentage of those in different employment and shopping Day.....	251
Table 7.6	Distance travelled (miles) by participant (%) for shopping Purpose.....	253
Table 7.7	% using different transport modes for main or top up shopping and distance travelled.....	253
Table 7.8	Participants (%) travelling distance (miles) for shopping purpose North/ South comparison.....	255
Table 7.9	North/ South comparison of travel time to store.....	256
Table 8.1	Fruit stocked in the home.....	259
Table 8.2	Vegetables stocked in the home.....	261
Table 8.3	Carbohydrates stocked in the home.....	263
Table 8.4	Meals stocked in the home.....	264
Table 8.5	Protein stocked in the home.....	265
Table 8.6	Dairy stocked in the home	266
Table 9.1	Mean values for each nutrient group.....	270

LIST OF ABBREVIATIONS

HEISB – Healthy Eating Indicator Shopping Basket

A set of 35 food items designed by Dawson et al, 2008 (See Anderson et al, 2007)

LGS – Large General Store; food store of greater than 15,000 sq ft selling area

MGSC – Medium General Store which is part of a Chain group; food store of between 3,000 and 15,000 sq ft selling area

MGSI – Medium General Store which is Independently owned; food store with less than 3,000 sq ft selling area.

SCS – Small General Store which is part of a Chain group; food store with less than 3,000 sq ft selling area

SIS – Small General Store which is Independently owned; food store with less than 3,000 sq ft selling area.

Definitions as used in Dawson et al (2008)

ACKNOWLEDGEMENTS

Firstly I would like to thank my doctoral supervisors Professor David Marshall and Professor John Dawson for their support throughout the project. Their advice, support and encouragement have been greatly appreciated.

I am very grateful to Food Standards Agency Scotland who provided me with funding and offered support and advice throughout the project. Thanks also to Janet Kyle at Aberdeen University for her help with the Food Frequency Questionnaires.

My thanks also go to all the participants who took part in the study and those who aided with the recruitment of participants. Everyone was very kind and helpful and without whom the study would not have been so interesting or enjoyable.

CHAPTER ONE

INTRODUCTION

1.1 Introduction to Thesis

The issue of food access and in particular the lack of adequate food access in certain areas has received growing attention in recent years (Dawson et al, 2008; Cummins and MacIntyre, 2002a, 2002b; Sooman et al, 1993; White et al, 2004). In 2000, The New Policy Institute highlighted the need for a definition of what constitutes adequate food access which is acceptable, both to government at national and local levels. In its very simplest form, adequate access is the ability for all members of society to obtain sufficient food for healthy living (FSA, 2008); however, this is a complex issue.

This thesis aims to explore how food access impacts on consumer perceptions in relation to food choices and enhance our current understanding of how consumers use their food retail environment (Broadbridge and Calderwood, 2003; Ruston, 2002). By using qualitative interviewing it aims to understand what contribution food access makes to consumer food choices and their perceived access to healthy foods. Previous research has suggested consumers utilise coping mechanisms in order to manage food access issues (Furey et al, 2001; McKie, 1998; Whelan et al, 2002; Wrigley, 2004) and this thesis will describe the mechanisms used within the Western Isles and identify other factors which are relevant to consumer food choice.

As levels of ill health and disease continue to increase (WHO, 2008), poor dietary behaviour has been shown as a major contributory factor in cardiovascular diseases, certain cancers and obesity (Esposito & Givigliano, 2006; Riboli & Norat, 2001). It has been proposed (Scottish Office, 1996) that poor access to food retailers and poor retail provision may have contributed to these poor dietary behaviours however, no direct link has been proven (Cummins et al, 2005). Much of the research to date has

concentrated on mapping food retail provision in order to identify disparities in provision and provide a link between these and areas of ill health. There has been little research on the links between the store and the home and how retail provision shapes consumer perceptions of food access.

1.2 Genesis of Research

The Scottish diet is notoriously high in fat, salt and sugar and low in fruit and vegetables. Next to smoking, the Scottish diet is the single most significant cause of poor health, contributing to a range of serious illnesses, which includes coronary heart disease, certain cancers, strokes, osteoporosis and diabetes. The poor diet of deprived communities is a major reason why they experience such poor health (Scottish Office, 1999).

Eating for Health: A Diet Action Plan for Scotland, SDAP, (Scottish Office, 1996) is one of the UK's best developed and most mature health improvement programs. It provides a framework for the action needed over a 10 year period to improve Scotland's diet. One of the main priority areas identified by SDAP to improve the nations eating habits is tackling poor food access. SDAP has identified four major interlinking, barriers to improving the food access of individuals. These are accessibility, affordability, culture and skills.

Ruston (2002) found that 6% of the population as a whole found it difficult to access a supermarket however this increased to 16% when the household did not have access to a car. People with cars travel further for shopping (Social Exclusion Unit, 2003) which increases their choice of store and subsequently the range of food items available. Within rural areas this problem is magnified as 78% of rural settlements do not have a general food store or a small village shop (Countryside Agency, 2001a, cited Social Exclusion Unit, 2003) and this further restricts their access to any food provision.

Diet is a contributing factor in the major causes of diet and ill health (Scottish Office, 1993) and it is those with lower socio-economic status who are most at risk (Garret, 2004). The Scottish Health Survey (2003) found that fruit and vegetable consumption varied by socio-economic group with consumption decreasing as household income decreased and as area of deprivation increased. Eating habits were also shown to vary between socio-economic groups. People in the lowest income households, and the most deprived areas were more likely to have less healthy eating habits (higher consumption of non-diet soft drinks/ crisps/ savory snacks/ chips and meat products) than those in the highest income households in the least deprived areas.

A study by Dibsall et al (2003) looked at low-income consumers' attitudes and behaviour towards access, availability and motivation to eat fruit and vegetables. Participants in this study did not feel they had a problem with eating healthily however only 18% claimed to eat the recommended 5 or more portions of fruit and vegetables a day. This suggests these low-income consumers were not aware of healthy eating recommendations for fruit and vegetables which may explain, in part, the lack of dietary improvement within this group as they do not recognize there is a problem. There may also be some discrepancy between their perceptions of a healthy diet compared with the definition. However other factors such as economic constraints (cost and dispensable income), motivational and lifestyle factors must also be taken into consideration.

In a comparison between the Scottish Health Survey and the English Health Survey, Hanlon et al (2005) found that deprivation scores can no longer explain the differences in mortality rates between England and Scotland. Scottish respondents had a substantially and significantly higher risk of Ischemic Heart Disease with mortality rates in Scotland lagging behind its economic development. The authors suggest that although material deprivation has improved the psychological and cultural scars remain and it is these factors which impede improvements in health in Scotland. While other factors such as genetic predisposition may explain some of the elevated risk of certain diseases in Scotland, it is the social and cultural aspects of food access and food choice which this thesis aims to investigate further.

Funding for this research was provided by the Food Standards Agency Scotland (FSAS) in order to compliment a national study of food retailing in Scotland (Dawson et al, 2008). The aims of this project intend to complement those of the main food access project (FSAS S04005) by exploring food retail provision from a consumer perspective.

Food access problems are thought to be exacerbated by rural and remote locations and for those living in deprived communities (Anderson et al, 1996; Scottish Office, 1999). A key objective of the FSAS Diet and Nutrition Strategy (2003) was to 'increase access to healthier food choices, particularly in low income and rural areas' (Page 11). The Scottish national study measured food access from a retail perspective. The research did not look at how consumers perceive their food retailing environment and how this shapes their food access. This study examines food access from the consumer perspective and in doing so the research moves the investigation beyond the retail store and into the home. Fulfilling the FSAS objective of exploring food access issues in low income and rural areas this study was carried out within in a remote deprived area in order to add to the knowledge about consumers in these areas.

1.3 Research Design

In order to develop a broad descriptive account of consumers' food shopping experiences and their perceptions of food access a mixed methods approach was adopted for this study. In line with the research remit set by the funding body (FSAS) the study was carried out within the Western Isles.

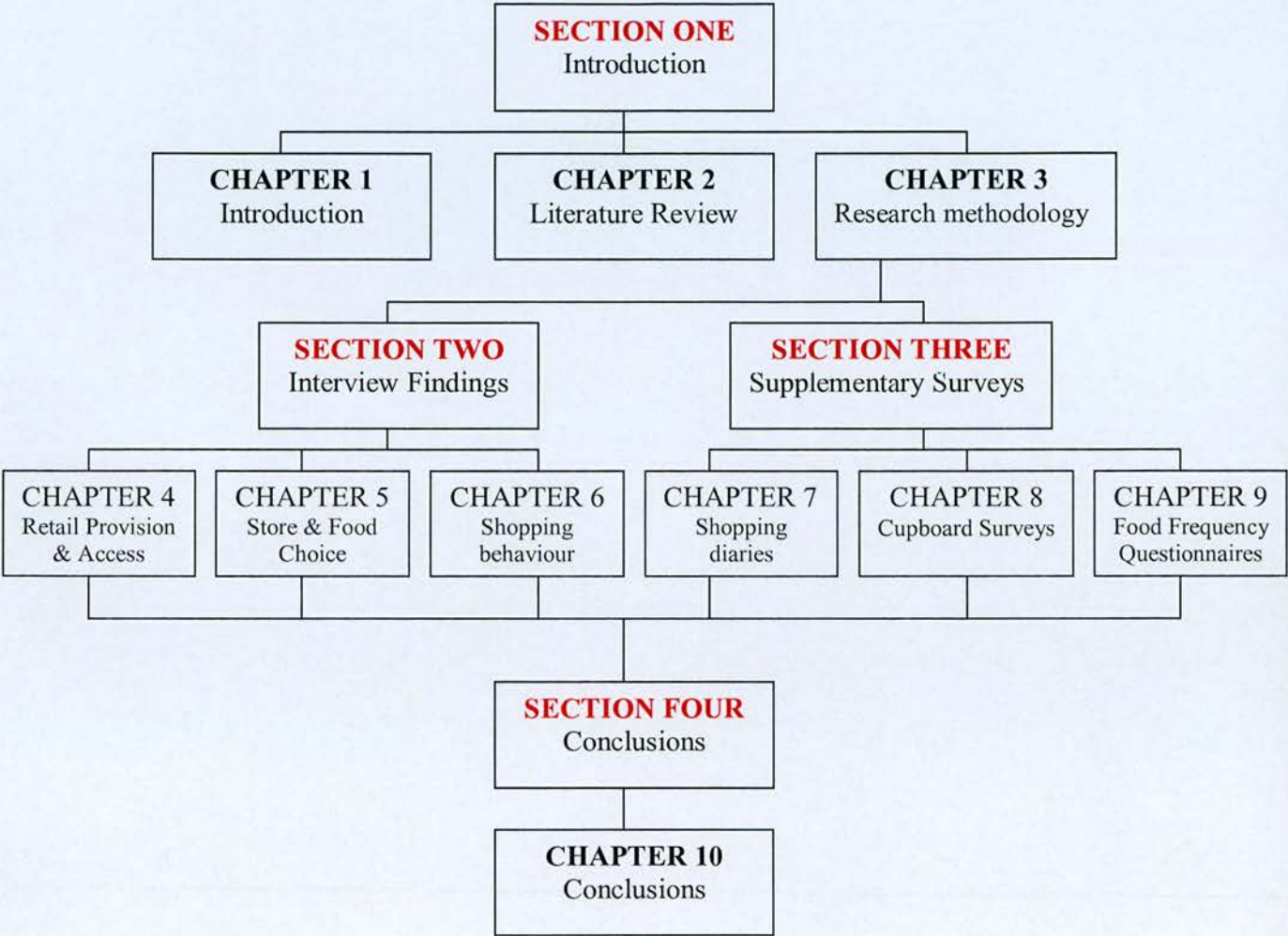
The study consisted of two phases of data collection, the first within the islands in the Southern Western Isles and the second within the islands in the North. A total of 56 participants were recruited and all participants were asked to complete four separate forms of data collection; a semi structured interview, a cupboard survey, a food frequency questionnaire and a 7 day food shopping diary. The purpose of

combining these methods was to approach the research questions from varying perspectives addressing areas which may not be apparent using only one or two methods.

1.4 Structure of Thesis

There are four sections to this thesis. Section one provides an introduction to the research, review of the literature and consideration of the methodology (Chapters 1 - 3). Section two presents the results from interviews (Chapters 4 – 6) while section three provides results from the supplementary surveys (Chapters 7 – 9). Finally section four presents the conclusions (Chapter 10). Figure 1 below shows how these sections and chapters fit together

FIGURE 1.1 – Structure of Thesis



Section One

Chapter two introduces the literature and reviews previous research in the areas of food access and how this issue has arisen in policy as well as in food choice and health inequality debates. It begins by exploring how food access is defined before examining the issues of food access at national, local and individual levels, exploring the research which identified this problem and some of the policies aimed at tackling food access. It concludes by examining some of the ways in which consumers manage food access problems.

Chapter three introduces the research methodology. It outlines the objectives of the research and methods used in this study to explore consumer perspective on food access and its impact on their food choice in remote Scottish communities. It provides the rationale for the selection of the study area. Recruitment, sampling, data collection and the multi method approach used are discussed and justification for the research design is presented. The process of data analysis is also outlined in this chapter.

Section Two

Chapters four to nine outline the findings from each of the research methods.

In this section, chapters four to six discuss the findings from individual interviews and are structured to follow the food shopping experience from the home, to the store, within the store and the journey back into the home.

Chapter four explores how participants perceived the stores available to them on the islands and how they access and use these different types of stores. It looks at participants' views of the retail mix in their area and how the type of store, size of store and stock in store affects how they view the food retail provision in their area. This chapter then goes on to discuss how participants access food stores and how they regard their access to these stores. Factors that affect access both to the store and within the store are also discussed.

Chapter five discusses store choice decisions, in store availability and food choice. Participants' choice of store was influenced by several different factors, these are discussed in this chapter and fall into the broad categories of consumer choice, practical or moral and ethical considerations. Store choice decisions were often influenced by availability of produce in store. Choice of store and other issues, such as the range and variety of items stocked along with the quality of produce, influence consumer perceptions of availability.

Chapter six introduces a discussion on consumer food shopping behaviour and how consumers adapt to their food retail environment. It goes on to discuss the many ways in which consumers have adapted the food retail environment including modifying food shopping behaviour and using alternative food networks.

Section Three

Section three presents the findings from the supplementary surveys carried out. Chapter seven presents findings from the shopping diaries, chapter 8 the cupboard surveys and chapter nine the food frequency questionnaires.

Chapter seven presents findings from the shopping diaries and builds a picture of how participants shop on a daily basis in terms of frequency of shopping trips, mode of transport, travel distances and linked activities.

Chapter eight discusses the findings of the cupboard surveys. It considers how what is available in stores affects what participants have in their home. The Healthy Eating Indicator Shopping Basket (HEISB), used in the national retail survey (Dawson et al, 2008), was used as the basis of the in the home 'cupboard survey'. This chapter draws comparisons between cupboard survey data and findings from the national retail survey.

Chapter nine shows the findings of the food frequency questionnaires. These were used to give some indication of participants' food consumption in order to compare consumption with recommended intakes. Comparisons are also drawn between study participants and national consumption data.

Section Four

Finally, chapter ten summarises the main findings and contributions of the research. Differences in perceptions of retail food provision reflect the nature of the retail

structure of an area with the presence of a large store resulting in a more favourable perception of provision. Consumers' perceptions of food retail provision in this area support previous suggestions of disparities in provision. However, a number of islanders have devised ways to overcome these disparities that utilise alternative food networks drawing on household and community networks to increase their choice. Areas for future research are discussed.

CHAPTER 2

FOOD ACCESS

2.1 Introduction

This review of the literature introduces previous research on food access and discusses how this issue has arisen in the food policy debate around food choice and health inequality. It begins by looking at how food access is defined before examining the food access at national, local and individual levels. This review examines current approaches to measuring food access, their contribution so far and outlines their limitations in assessing how food access impacts on food choice. Research from geography, retail, marketing and sociology are then introduced to provide alternative insights and allow better understanding of the multi-faceted nature of food access and how it impacts on food choice.

2.2 Background

2.2.1 Diet & Health – Policy

Over the past two decades there has been global recognition that positive nutritional health is an essential contributor to overall good health and well-being, and that poor nutrition is contributing to the burden of chronic preventable diseases (Srinath et al, 2004; WHO, 2003). Poor diet is known to influence the risk of cancer and heart disease and the importance of nutrition for mental health and well-being is gradually becoming clearer. Around 70,000 fewer people, one in every ten deaths, would die prematurely each year in the UK if diets matched the nutritional guidelines on fruit and vegetable consumption, and saturated fat, added sugar and salt intake (Strategy Unit, 2008). Alongside social impacts, the economic burdens of diet-related ill health are huge – estimated at £6 billion in additional NHS costs alone each year

(Rayner and Scarborough, 2005). In order to improve the populations' health diet has become a priority for the UK government (Scottish Government, 2008a).

It is well established that dietary patterns in Scotland contribute to high rates of chronic diseases such as heart disease, obesity, type 2 diabetes, high blood pressure, stroke and certain types of cancer (ScotPHO, 2009).

Due to the known importance of diet in the aetiology of these diseases policies and plans to improve the Scottish diet have been developed. Two key Scottish Executive policies aimed at addressing diet at a national level are *Eating for Health, A diet action plan for Scotland* (SDAP, 1996) and the updated *Eating for Health, Meeting the challenge* (2004).

In the mid-1990s, Scotland had a poor record of diet-related ill-health, and the aim of the SDAP dietary targets were to reduce diet-related mortality and morbidity in Scotland, particularly that related to illnesses such as heart disease, cancer and diabetes and to being overweight/obese. In this way, the SDAP dietary targets were, and remain, valid and laudable in their public health intent and sit comfortably with Scotland's other social, economic and political goals (Health Scotland, 2006).

The SDAP (Scottish Office, 1996) lists 71 recommendations, spanning the sectors of primary producers; manufacturers and processors; the retail sector; community action; pregnancy, pre-school children and school students; caterers; the NHS; and local authorities. To support these recommendations, nine dietary targets were introduced to address the improvement in intake of specific food groups including salt, sugar, fat, and fruit and vegetables. These were:

1. Fruit and Vegetables – average intake to double to more than 400g per day
2. Bread – intake to increase by 45% from present intake of 17g per day
3. Breakfast Cereals – average intake to double from the present intake of 17g per day
4. Fats – (i) average intake of total fat to reduce from 40.7% to no more than 35% of food energy

- (ii) average intake of saturated fatty acids to reduce from 16.6% to no more than 11% food energy
- 5. Salt – average sodium intake to reduce from 163 mmol per day to 100mmol per day
- 6. Sugar – (i) average intake of NME sugars in adults not to increase
(ii) average intake of NME sugars in children to reduce by half to less than 10% of total energy
- 7. Breastfeeding – the proportion of mothers breastfeeding their babies for the first six weeks of life to increase to more than 50% from the present level of around 30%
- 8. Total complex carbohydrates – increase average non-sugar carbohydrates intake by 25% from 124 grams per day through increased consumption of fruit and vegetables, bread, breakfast cereals, rice and pasta and through an increase of 25% in potato consumption
- 9. Fish – (i) white fish consumption to be maintained at current levels
(ii) oil rich fish consumption to double from 44 g per week to 88 grams per week

Subsequent reports reviewed progress and proposed further recommendations in order to achieve SDAP (1996) targets. *Eating for Health, Meeting the Challenge* (2004) calls for a more co-ordinated approach to implement the SDAP (1996), both locally and nationally at strategic and policy levels, and builds upon key actions outlined in the Scottish Executive public health policy *Improving Health in Scotland: The Challenge* (2003).

Successfully delivering national policies such as the SDAP (1996) means translating these guidelines into local actions, plans, and policies. This is an essential requirement for the progression of health improvement in Scotland, and it is outlined by the Scottish Executive white paper *Towards a Healthier Scotland* (1999) and *Our National Health: A Plan for Action, a Plan for Change* (2000) – both of which aim to deliver national health improvement priorities such as diet at a local level by identifying local needs supported by partnership working.

An independent review panel, set up to examine the progress of the SDAP since implementation, found that despite the considerable progress that has been made in implementing the SDAP recommendations, overall the action taken has not had a significant impact on population trends in food consumption and nutrient intakes in Scotland over the last 10 years (Health Scotland, 2006). A separate report from the Food Standards Agency Scotland (Wrieden et al, 2006) as well as the panel's own analysis showed that the dietary targets set for 2005 are overwhelmingly not being achieved.

The SDAP review panel proposed four overarching strategic themes to guide Scotland's policy in order to improve Scotland's record in diet related ill health. These 'themes' draw on the important aspects of the SDAP but concentrate on a more focused approach to health improvement rather than the population wide approach adopted by the SDAP. They propose any future food and health policy must have: closer integration between the policy goals of improving Scotland's diet related ill health and those of social justice, sustainable development and agriculture; equality must be central to the principles of any future sustainable, food and health policy; re-establish grounds for engagement with food industry; and the need to develop new multi level governance structures, institutions and leadership.

2.2.2 Diet and Health Inequalities

There are social inequalities within health in Scotland (Leyland et al, 2007) as well as other populations (Robertson, 2001; Lynch et al, 2001; Shaw et al, 2005). These inequalities demand attention as the gap between the health of different social groups continues to widen (Scottish Government, 2008b). Death rates from heart disease and lung cancer, the two biggest causes of premature death, for people aged 35-64 years are around twice as high among those from manual backgrounds as from non-manual backgrounds (Health Statistics Quarterly, 2000). More specifically there are links between diet related ill-health and low socio economic status. Studies have found differences in various aspects of health are apparent between different groups

in society (Blamey et al, 2002). In particular links between poor diet and low socio economic status have been shown (James et al, 1997; Turrel et al, 2004; Patrick and Nicklas, 2005), with those from lower income households and those living in disadvantaged areas with limited resources tending to have a higher incidence of CHD and stroke.

Hersey (2001) found low income shoppers were less likely to use the nutritional information on labels when buying food. For those on a low income or living in disadvantaged areas there may be certain barriers which inhibit healthy eating and the SDAP introduced the idea of practical obstacles to healthy eating. There are many barriers which contribute to inequalities in diet between different social groups and these must be identified and overcome in order for everyone to have the opportunity to choose a healthy diet. The four main barriers identified by SDAP were:

- Availability – limited availability of healthy foods of an acceptable quality and cost
- Affordability – difficulty and expense of travelling on public transport to ‘out of town’ shopping centres
- Skills – lack of basic cooking skills and equipment
- Culture – long established dietary habits and reluctance to experiment with new foods.

All of these barriers; physical, economic and attitudinal must be overcome if food access is to be a reality for all.

The failure to adequately address the issue of inequalities were one area which the SDAP review panel thought had reduced the impact of the SDAP. They thought the impact of inequalities were underestimated and as such propose equality be central to any future food policy. Food access is one area of food policy which is thought to have considerable impact on food choices available to certain individuals and communities.

2.3 Defining Food Access

The term 'food access' takes into consideration the complexity of issues which affect a person's ability to obtain sufficient, adequate food for good health (NCH, 2004). These issues are wide ranging and include availability, affordability, culture and skills (SDAP, 1996). There are many definitions of food access each of which focuses on the specific issue being addressed, but as yet there is no agreed definition of what constitutes 'adequate' access to food.

Not only does the term 'adequate access' need to be defined but the issue of food access also remains undefined with its many facets having to be taken into consideration. 'Food access' is a broad term however, those studying, measuring and monitoring food access are not always concerned with the whole issue but often with only one or perhaps two aspects of the problem such as location of stores, transport networks, product range and price in store or more individual aspects such as adequate income, storage/cooking facilities in the home and cooking skills.

As such the defining of 'food access' is often dependant on the priorities or objectives of the study concerned. For example, in examining affordability issues in the context of food access from a sociological view point it is said 'these factors run in parallel with the amount of money an individual or household allocates to food expenditure as driven by the money available and the relative importance placed on food' (Dowler, 1998). However, studies examining affordability from a retail perspective are more concerned with price comparisons in stores and the variation in cost of certain items between different areas (Block and Kouba, 2006) and/ or store types (Liese et al, 2007). Examining food access from the retail perspective has highlighted some areas where the retail food environment is unsupportive in providing affordable, healthy food options in store. These unsupportive food environments have been termed 'food deserts', the existence and extent to which they exist and their common geographical and demographical characteristics have been investigated.

Use of the term 'food deserts' has, to date, been used most commonly to describe areas where the retail environment is the main barrier to accessing healthy foods. However, Shaw (2006) proposes the barriers to consumption of a healthy diet may be classified according to whether such barriers are financial, physical, or derive from the mental attitude and knowledge of the consumer. As such a threefold classification is proposed by breaking down the concept of access into three contributory factors to access problems: 'ability', 'assets' and 'attitude'.

- Ability problems may be defined as anything that physically prevents access to food which a consumer otherwise has the financial resources to purchase and the mental desire to buy e.g. physical difficulties opening packaging/ carrying heavy shopping
- Asset problems may be defined as lack of any financial valorisable asset that prevents consumption of food the consumer can otherwise physically access and has the desire to consume e.g. lack of money for travel costs to supermarket/ lack of adequate cooking facilities or storage such as fridge/ freezer
- Attitude problems may be defined as any state of mind that prevents the consumer from accessing foods they can otherwise physically bring into their home and have the necessary assets to procure e.g. culturally based prejudices towards certain foods, lack of knowledge or cooking skills

This classification may be used to more broadly define 'food access' and the associated problems and barriers of making healthy food choices and consuming a healthy diet.

Food access is often used as an umbrella term to identify the overarching theme with individual aspects within this defined. However, without an actual definition for the term 'food access' it remains difficult to identify the issues, make comparisons, and begin to address the problem. For progress to be made in this area a definition must be agreed upon which takes into account both;

- Economic access – having enough money to buy appropriate food, which depends on how much money a household has, how much it can allocate on food (as opposed to other, mandatory, expenditure such as utilities' costs, rent and debt repayment), and on the price of food, and
- Physical access – which refers to the range and quality of food available in shops that people can actually reach, whether by foot, public transport, or, if they have access to one, by car. (New Policy Institute, 2000).

From this, separate definitions can be made which relate to these aspects of food access and allow a better understanding of the problems being addressed and measured to allow the proposition and development of solutions.

In trying to define food access it is apparent this is a complex area which impacts at national, local and individual levels, to varying degrees and for varying reasons, and it is this diversity which makes it difficult both to define and measure.

2.4 National Issues

At a national level the problems around the issues of food access are discussed in terms of implementing solutions to these problems. These include ensuring the population has an adequate income in order to be able to purchase a healthy diet, addressing access to stores in terms of transport networks and planning of store locations as well as looking at agriculture and how food is produced and distributed throughout the country.

2.4.1 Food Poverty or Food Security

In relation to economic access, food poverty or food security as it is more commonly known in the US, is an area of food access which is of concern to government and influences policy decisions. Food poverty is commonly defined as 'the inability to acquire or consume an adequate quality or sufficient quantity of food in socially acceptable ways, or the uncertainty that one will be able to do so' (Riches, 1996). It

is estimated that some 4 million people in the UK are affected by food poverty (Gordon et al, 2000). The existence or extent of food poverty varies throughout communities and over time although certain sectors of the population are more vulnerable, such as the elderly and those on a low income.

There are many studies which try to address some of the issues surrounding food access in relation to food poverty in both the United Kingdom (UK) (Donkin et al., 1999; Wrigley et al, 2002; O'Neil, 2005) and the United States (US) (Marcus, 1969; Hayes, 2000; Sloane et al, 2003). Although the studies in both these countries are investigating or measuring the same problem they tend to have a different focus. Studies in the UK tend to focus on the physical aspects, such as poor levels of access to reasonably priced, nutritious, good quality food (FSA, 2007). Whereas the US studies focus more on economic access and the notion of 'food security', defined as 'a situation that exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life' (Food and Agriculture Organisation, 2001).

2.4.2 Relative Poverty – Adequate Income?

Poverty or relative poverty is thought to be a major contributor to a household's ability to access adequate food for health and often linked to income levels. "People are said to be living in poverty if their income and resources are so inadequate as to preclude them from having a standard of living considered acceptable in the society in which they live. Because of their poverty they may experience multiple disadvantage through unemployment, low income, poor housing, inadequate health care and barriers to lifelong learning, culture, sport and recreation. They are often excluded and marginalised from participating in activities (economic, social and cultural) that are the norm for other people and their access to fundamental rights may be restricted." (European Commission, 2004, page 8). Limited or restricted access to food lies within this definition as food plays a major role in many social and cultural activities and norms.

At a national level, it is important for Governments to consider income levels in relation to benefits and minimum wage levels to ensure that all sectors of the population are free from poverty and have an adequate income to enable them to achieve a healthy diet. Poverty is currently measured in three ways but none of these provide a socially agreed definition.

1. Relative income measures: 60% of median income is widely accepted at the primary threshold of income poverty, and the measurement used by the government in the UK. (£192 per week in 2002/03, NSO (2004))
2. Measures of deprivation: allow calculations of how many people are poor in the sense that they can not afford what most people regard as necessities. This illustrates how deprivation is associated with low income but not what level of income people need to avoid poverty (Bradshaw et al, 2008)
3. Budget standards: define minimum acceptable standards by calculating what is needed to afford an acceptable standard of living (Bradshaw, 1993)

Budget standards are often used in many countries including the UK, US, Canada and Australia in order to assess income levels and ensure the general population has an adequate income in order that they can achieve a healthy diet and acceptable standard of living.

Budget standards are specified baskets of goods and services which, when priced, can represent predefined living standards. These are used by Governments and other agencies to estimate the levels of income and expenditure that represent given standards of living for households within a population. The main such standard used in the UK, calculated by the Family Budget Unit (1998; 2000; 2004), is the minimum income standard “Low Cost but Acceptable” (LCA). This constitutes an income adequate to provide warmth and shelter, a healthy and palatable diet, social necessities, social integration, avoidance of chronic stress and the maintenance of good health (physical, mental and social) in a context of free access to good-quality health care, good-quality education and social justice (Nelson et al., 2002). There are specific budget standards for various household types’ i.e. single man aged 22-30

years, families with children. These allow different household types to be taken into consideration and do not just class one section of the population as “low income” but they do not take into account regional variations in price. This budget standard is also based solely on the opinions of experts without consulting the population who are in these different household types.

A more recent examination of budget standards has instead compiled household budgets to calculate the first minimum income standard (Bradshaw et al, 2008). This study aimed to find out what level of income people think is needed to afford a socially acceptable standard of living in Britain today, and allow them to participate in society. This method combined expert knowledge with in depth consultation with members of the public. Results varied by household type but the study found that most families with one person working full time, but relying on the minimum income wage, would be unable to reach the minimum standard of living defined by the study. In comparing this minimum income standard to the UK governments defined poverty indicator level, less than 60% median income, the poverty line is considerably lower. This indicates that families defined as being in poverty fall well short of the minimum standard of living as defined by this study and would not be able to provide an adequate diet.

Benefits and tax credit levels are still set without reference to the cost of living, meaning for most people dependent on them, a healthy diet is beyond their means (Family Budget Unit, 1998; 2000). Bradshaw et al (2008) suggest that those living in poverty do not have an adequate income to acquire a healthy balanced diet. Considering this in terms of food access it is apparent these sectors of the population have insufficient economic status to ensure adequate food access. To rectify this situation the minimum income standard could be used as an index of need for benefits, tax credits and minimum wages.

2.4.3 Retail Planning and Location

Ensuring individuals have adequate income in order to purchase food to form a balanced diet is important. Furthermore, being able to travel to, access stores and having a food store within an acceptable distance from the home is another factor which can impact on consumers' food access and food choices. In the late 1990's links were made between social exclusion, inequalities in health and the location or absence of food stores in areas of deprivation. By improving food retail access, making affordable healthy food more available, it was anticipated that diet might also be improved (Acheson, 1998).

In 1997, the Social Exclusion Unit was tasked with establishing how best to tackle the problems and inequalities associated with living in deprived areas where retail provision was poor. Eighteen policy action teams (PAT's) were set up to investigate the problems those living in these areas face, with one of these teams, PAT 13, focusing on access to shopping facilities. From this recommendations were made on helping smaller retailers to survive and attract customers, and on supporting community based schemes linking producers more directly with consumers (Social Exclusion Unit, 1998). However, while this report referred to some of the wider structural issues such as retail ownership and competition, supermarket location and pricing policies and the inadequate nature of many public transport services it did not address them.

The Independent Inquiry into Inequalities in Health report (Acheson, 1998) linked social exclusion and inequalities in health to the decline in town centre retailing. This was mainly attributed to the increasing numbers of large scale supermarkets locating on the edge of towns and cities, during the 1980's and early 1990's. This was thought to be of particular importance in urban areas and to 'disadvantaged consumers' such as those on a low income, the elderly and those without access to a car.

With the proposal that the increase in out of town superstores had been instrumental in the decline of local food retailers and an increase in the number of people facing food access issues, tightened UK land use planning regulations were implemented (Planning Policy Guidance (PPG) 6, 1998). The need to regenerate cities, towns and district centres is the main message of the revised PPG6 guidance (1998). Whilst calling for a halt to the spread of out-of-town developments and encouraging developers to invest in traditional town centres, PPG6 does not totally preclude out - of-town centre developments. However a sequential approach of preference is made clear: namely town centre, then edge of centre developments before out of centre developments. Where this is not possible the guidance highlights criteria against which proposed out of centre developments should be assessed, including: impact on the vitality and viability of existing centres, accessibility by a choice of modes of transport and the overall amount of car use required. The success of PPG 6 has been widely debated with many questioning its application and the way in which the multinational retailers have adapted their retail format to comply with the recommendations (Wrigley, 1998; Wrigley et al, 2002; White, 2007).

The PPG 6 has since been superseded by the governments more recent planning policy statement 6 (2005). Much of the PPS 6 reverberates with the sentiment of the previous policy guidance calling for planning for the growth and development of existing centres and promoting and enhancing city centres. These objectives are broadened out to wider goals of enhancing consumer choice; to allow genuine choice to meet the needs of the entire community and particularly the socially excluded, support efficient, competitive and innovative retail and to improve accessibility; ensuring that existing or new developments are or will be accessible and well serviced by a choice of means of transport. These planning policy guidelines apply to all retail stores, entertainment and sports facilities, offices, art, culture and tourism and is not restricted to food retailers.

Although much for the PPS 6 is more pertinent to urban areas specific references are made to rural areas. It states: 'market towns and villages should be the main service centres in rural areas, providing a range of facilities, shops and services at a scale

appropriate to the needs and size of their catchment areas. They should provide a focus for economic development and rural-based industries, including markets for locally-produced food and other products, and for tourism. However, the health and vitality of many of these towns has declined in recent years, and many more are vulnerable to changing economic and lifestyle patterns (PPS 6, 2005). In order to protect these areas and achieve policy principles the responsibility is placed on local authorities to recognise the importance placed on markets town centres and village stores when considering planning applications for future retail developments or change of use for i.e. the village store.

The Scottish Planning Policy 8 (2006) sets out the Scottish Executive's policy for town centres and the key uses, particularly retailing, which contribute to their economic growth and enhancement and, in Scotland replaces NPPG 8 Town Centres and Retailing (1998). The Scottish Executives 2004 research indicates that work and leisure routines favour convenient access to goods and services. It also found that the retail sector has become increasingly diverse and complex, and has adapted to reflect people's changing needs. This has led to the development of shopping patterns that take in a range of different retail locations, in both town centres and on out-of-centre sites. The SSP 8 recognised the differing needs of consumers and the importance of different types of retail location as these serve different purposes, but in combination, should meet the needs of the whole population.

In order for these retail developments to meet the needs of the whole population policy principles were set to achieve this goal. These policy principles are: identifying and promoting town centres as part of a network of centres; focusing development in existing town centres by using a sequential approach to development (as specified in PPS 6); maintaining, improving and developing town centres; promoting a safe and attractive environment; ensuring that centres are accessible to all sectors of the community and regularly monitoring and reviewing their policies. Continuing to recognise the individual needs of local circumstances and community requirements the SPP 8 advised local planning authorities to tailor their approach,

development plans and other strategies to better reflect local needs when interpreting national policy.

The needs of rural communities are also addressed and the differing nature of the retail environment in these locations. In rural areas, a range of shops and other facilities are provided in small towns, villages and other accessible locations. These locations form an important part of a network as the uses provide vital local community and economic services. Their loss can therefore have a severe impact not only on small settlements but also on the surrounding rural locality. It is therefore stated that planning policy should support the vital role of these centres (SPP 15, 2005) in order to maintain adequate retail provision to facilitate consumers access to food.

2.4.4 Transport

Transport networks in and around these town centres are also important in order to ensure these locations are accessible. Within the PPS 6 document there were recommendations for the government to reduce the need to travel to stores, by encouraging local retail regeneration. However, many living in rural and remote areas are dependant on ownership of a private car due to the distances involved, convenience and in some cases the absence of public transport (Skerrat and McKie, 1997).

Where public transport has been improved in some remote areas this has had a detrimental effect on small local stores. There is anecdotal evidence in a study carried out by Gray et al (2001) to suggest that the improved bus service in the Western Isles has worked to the detriment of shops and post offices in the crofting townships. Reports suggest that elderly users of buses have transferred their pensions from the local post offices to the main branch in Stornoway. This trend undermines the long term sustainability of the community shop and further marginalises those households who are unable to travel to shops and services.

2.4.5 What is the ‘optimum retail mix’?

One question which needs to be answered in order to improve retail food access in areas where it is deemed to be poor is: what is the optimum retail mix? Research on retail and social exclusion (Piacentini et al., 2001; Williams and Hubbard, 2001; Williams and Windebank, 2002) identified local stores as key services for the socially excluded. The PAT 13 (1998), the PPG 6 (1998), the PPS 6 (2005) and the Social Exclusion Unit (2000) all suggested supporting small retailers, promoting town centre regeneration and community based initiatives as ways to improve the food retail environment. Although there is evidence to suggest these types of stores and retail environments do not provide the best food provision (Kaufman, 1999; Kirkup et al, 2004; Wrigley et al, 2002). Following the tighter planning restrictions for large stores; regeneration partnerships and the need to provide food retail facilities in deprived areas led to a variety of initiatives being implemented by the major retailers in order to continue to expand such as the launch of smaller store formats in town locations such as Tesco Metro. This can have an impact on independent retailers in as it increases competition in the area and may reduce custom as a result of the increase in choice of stores.

To assess the impact of retail led regeneration on accessing stores several studies have analysed the effects of new food retail provision on diet in areas previously identified as having poor food retail provision. Wrigley et al (2002) carried out a before and after study of retail provisioning in Leeds (UK). Results showed that the large scale intervention benefited residents by reducing their walking distance to the store and found a positive impact on consumption of fresh fruit and vegetables, amongst some groups of the residents (Wrigley, 2003). Conversely, Cummins et al (2005) carried out a controlled study in Glasgow (UK) also looking at pre and post intervention of a large supermarket into the area but found little effect on fruit and vegetable consumption. Although these studies both showed the introduction of a large supermarket can increase access to, or availability of a range of health foods this does not guarantee a simultaneous increase in consumption of such foods.

Having suggested support for small retailers and community based initiatives it is evident they are important for reasons such as convenience and providing a sense of community, particularly in rural villages (Smith and Sparks, 2000). What is also apparent is that many areas also require large supermarkets in order to increase perceptions of choice and competition between stores, of value for money and access to facilitate increased consumer satisfaction with retail mix in an area (Clarke et al, 2007). In a survey of consumer satisfaction of their local selection of grocery stores Clarke et al (2007) found 'variety' was the key to achieving maximum satisfaction. They found the local store assortment was more attractive to the consumer where there was 'a requisite variety in store mix' and the presence of a small store within a local (5 minute) assortment was significantly valued, irrespective of store ownership. However, trade offs between place of residence and retail choice have been found with those living in rural areas accepting a lack of shops and more expensive products (McEachern & Warnaby, 2005)

In terms of improving healthy food choices, large scale food retailing may not be the most effective way to combat poor diet but they may have a psycho-social impact on health (Cummins et al, 2005). Other options such as street and covered markets (including farmers' markets) can make a valuable contribution to local choice and diversity in shopping as well as the vitality of town centres and to the rural economy (PPS 6). It is likely a combination of factors will be required in order to improve the nation's diet and will not be solved by merely improving the food retail environment, although this is a crucial step. The optimum retail mix in order to achieve this is likely to include a range of store types and will vary dependent on the area.

2.4.6 Food Industry/ Agriculture systems

Agriculture, food production and food transportation are both short and long term considerations for food access. The government must ensure the country has an adequate supply of good quality, safe food now and for the future. With increased concerns over the environmental impact of food production and food transport as well as the limited supply of fossil fuels for the production and transportation of food

there is an increasing interest in sustainability and producing and consuming more local food (AEA Technology, 2005, 2006).

In response to these concerns 'The UK Government's vision for the food system is one that is more sustainable – economically, socially and environmentally. The future strategic policy objectives for food should be to secure: fair prices, choice, access to food and food security through open and competitive markets; continuous improvement in the safety of food; a further transition to healthier diets; and a more environmentally sustainable food chain.' (Food Matters, 2008, page 1).

In terms of achieving dietary targets the SDAP review (Health Scotland, 2006) highlighted the need for the food industry and agriculture to play a more active role and proposed that closer integration is need between the policy goals of improving Scotland's diet related ill heath and those of social justice, sustainable development and agriculture. The report concluded that the SDAP had underplayed the powerful role of the food supply chain in shaping food content, access, availability and consumer demand. The shifts towards sustainability and closer examination of the impact of food production on the environment are becoming more important in diet and health improvement policy and the review proposed Scotland should anticipate this change and transform the SDAP to a new sustainable food and health policy that brings together and attempts to harmonise production, supply and consumption to meet the policy goals of sustainability and public health (Health Scotland, 2006).

The Scottish government is keen to promote local food production, increase production and the quantities sold in Scotland. These are some of the issues proposed for discussion for the National Food Policy (The Scottish Government, 2008). Food production and agriculture is considered an integral part of the Scottish economy providing both produce and employment. It accounts for five percent of the rural workforce and contributes 1.3 percent GVA to the Scottish economy. In rural areas, where the industry is regarded as an integrated part of the rural economy, the contribution to economic, environmental and social benefits can be significantly higher (The Scottish Government, Agriculture, 2008).

Food in the UK travels 65% further than it did two decades ago (Pretty et al, 2005) and consumers are more concerned with the origins of where their food has come from and the conditions in which it has been produced. As a result of food scares and the ethical marketing of local food in terms of supporting local business and protecting the environment the UK has seen an increase in the number of farmers markets (Farmers Weekly, 2005). This is indicative of an increase in consumer desire to source food locally however, although the majority of UK consumers are interested in local food a much smaller proportion actively seek to purchase them, with estimates between 6% (Enteleca, 2000) and 10% (IGD, 2002). Nor are all sectors of the population equal in their interest to purchase food in this way with those on a low income (Hinrichs, 2000) and urban consumers (Weatherell et al, 2003) less likely to purchase food from a farmers market.

The Scottish food grant scheme was introduced in November 2008 and aims to help develop and promote Scottish food (The Scottish Government, 2008). The scheme for food producers and processors aims to support greater collaboration in the supply chain, in line with a future national food policy. By providing financial support to the food industry in this way and increasing the availability of local produce in chain supermarkets the Scottish government aims to improve productivity and profitability of the Scottish food industry and increase availability of local produce for the consumer.

2.5 Local Issues

Within the food access debate local issues are perhaps one of the most researched areas in terms of mapping store locations and comparing the availability and cost of products within stores. Comparisons have been made between different store types and within different communities and geographical locations in order to highlight inequalities in provision and draw links between access to food retailers and health.

On a regional or community level the issue of food access is well documented not only in the UK but also in the US (Jetter & Cassady, 2005); Canada (Nathoo and Shoveller, 2003) and Australia (Burns et al, 2004; Lee et al, 2002) with discussion arising from inequalities in health research (Consumers Association, 1997). Health inequalities have been identified within specific groups of the population i.e. African American (Horowitz et al, 2004) and geographical areas (Saltmarsh, 2005), with inadequate retail food access proposed as one of the contributing factors to these inequalities.

From this perception of inadequate retail food access the term “food deserts” has arisen and is used to describe areas lacking retail services within roughly a 500-meter radius (DETR, 2000). This definition however only explains one aspect of the term and is perhaps better defined by the Low Income Project Team (1996) as “areas of relative exclusion where people experience physical and economic barriers to accessing healthy food.” The description encompasses not only the availability of food, but also its variety, affordability and quality, the absence of which prevents local residents from making healthy food choices (Clarke et al, 2002; Cummins and Macintyre, 2002a). This aspect of food access focuses on food provision within stores in an area and this term has been widely published in both research (Whitehead, M, 1998; Furey, S, 2001) and policy papers (DoH, 1996, Acheson, D, 1998). However some question the evidence which supports this claim (Cummins & Macintyre, 2002; Wrigley, 2002) and argue there is a lack of systematic evidence based research on which to substantiate this claim. Some of this confusion can be explained by the difficulties faced when making comparisons between work in the same field which use varying survey designs and with research constructed using very different criteria.

At store level, this idea of inadequate food access has been extensively researched over the years. In order to identify the differences in food shopping provision, studies have compared socially contrasting areas (Alcaly & Klevorick, 1971; Sooman, MacIntyre & Anderson, 1993; Moorland et al., 2002; Sloane et al, 2003) finding disparities in store location, range of goods, price and quality. To measure

the food provision in these areas many of the studies have used a basket methodology – selecting a collection of items and gathering information on the availability and price of these chosen items.

2.5.1 Location of Stores

Store location has been extensively investigated as a result of the restructuring of the UK grocery retail sector over the past two decades. During this period large multiple grocery retailers have moved their operations to out-of-town areas, which has contributed to the closure of many smaller, independent stores (Clarke et al., 2002) and potentially created a gap in food retailing provision. This ‘gap’ in provision is also evident in the US with a shift to more suburbanization and ghettoization (Baylor, 2003, cited Garret, 2004). A larger number of shops in an area could suggest better food provision and it has been hypothesised that more affluent areas have a greater number of shops compared to more deprived areas (Morland et al, 2002a).

Horowitz et al. (2004) compared the availability and cost of diabetic healthy foods in a racial/ethnic minority neighbourhood with those in the adjacent, largely White and affluent neighbourhood in New York City (US). Findings showed the converse true in regards to number of shops with the less affluent area having twice the number of food stores per capita. However, the greater number of stores was not found to be indicative of better retail provision, particularly in relation to healthier items, as only 18% of these stores stocked the ‘healthier’ survey items compared to 58% in the more affluent area. Disparities in food availability were most pronounced in small stores – of which there were greater numbers and limited availability of items in the more deprived neighbourhood. Larger stores in both neighbourhoods stocked the ‘healthier’ items and this study therefore found store size to be a better predictor of item availability than number of stores.

Similarly, Cummins & MacIntyre (2002) investigated retail provision in Glasgow (UK) and found more stores, and large multiples in particular, tended to be located in areas characterised by socioeconomic deprivation. However, Alcala & Klevorick

(1971); Hayes (2000); Garret (2004) all found stores with larger floor space were located in more affluent neighbourhoods. Morland et al. (2002a) found this to be significantly so with over three times as many supermarkets located in the wealthier neighbourhoods and again store size was a better indicator of food provision than number of stores (Morland et al. 2002b). These findings suggest that although there may be a greater number of stores within an area of deprivation the larger multiple stores with a greater range of products tend to locate in the more affluent neighbourhoods and it is this which creates the 'gap' in retail provision. As discussed, the number of stores is a poor indicator of retail provision and store size should be used as a more accurate marker.

2.5.2 Range of Stock

Consuming a wide range of foods and a balanced diet is shown to be beneficial to health and the best way to meet daily nutritional requirements (FSAS, 1994) therefore the range of items stocked in a store may influence dietary choices. In the USA, Sloane et al. (2003) carried out an assessment of nutritional resource environment for healthy living in a targeted African-American area and contrasted the findings to a predominantly white area that was presumed to have a fuller resource environment. The findings were consistent with expectations as less low fat milk was stocked in the target areas and more fresh fruit and vegetables and special sections for diabetic/ low sugar/ salt in the contrast area. This poor provision of healthier items in lower socio-economic areas makes purchasing healthier foods more difficult when increased availability of these items are shown to be associated with meeting dietary recommendations among Black Americans (Morland et al, 2002b).

Williams (2002) surveyed an area of deprivation in Ohio (US) and found that the majority of stores had less than 50% of items indicated by the US Dept. of Agriculture's low cost and healthy food basket. This study also found the most available food group was the least healthy fats, oils and sugars, whilst the most

consistently absent were those most necessary for a healthy diet (meat, fruit and vegetables).

White et al (2004) compared a healthier and less healthy basket of goods for availability and price in Newcastle (UK). They found only 25% of stores stocked the full range of 'healthier' items whereas 50% stocked the full range of 'less healthy' items however this was not socio-economically patterned by area. White et al. also found store size to be a better predictor of availability as smaller stores stock more of the "less healthy" items and larger stores more likely to sell all of the full range of items surveyed.

2.5.3 Price & Quality

Those in lower socio economic groups generally have less money to spend on foods in total although a larger percentage of total income is allocated for food (National Food Alliance, 1997). It has been argued that the poor pay more (Marcus, 1969), less (Goodman, 1968) and that prices increase as neighbourhood income increase (Alcaly & Kleverick, 1971). These inconsistent findings can be explained, in part, by the number of variables which can affect the price of an item. The brand of an item, pack size and quality can all affect the price and can make comparison difficult. Both the store and the consumer can buy in larger quantities which will reduce the price of an item and this gives larger stores and more affluent consumers an advantage. Chain stores can also stock own label products which are normally cheaper than brands stocked by the independent stores therefore, areas serviced by multiples and symbol groups are likely to be cheaper than areas where independent stores are situated.

Cummins and MacIntyre (2002) used a basket methodology and found the cost of their 'basket' to be less expensive in the more deprived area. However the foods which were cheaper were of poorer quality and tended towards the high-fat, high-sugar types, which dietary guidelines recommend we eat less of (FSA, 2007). As those in lower socio-economic groups have less money to spend on food and are

more likely to buy high energy dense foods that are high sugar and high fat (Drewnowski, 2003a and 2003b). This price incentive towards the less healthy option may influence food choice for this group.

A study by Hayes (2000) found prices to be cheaper in less affluent neighbourhoods but not significantly. Hayes observed that although cheaper meats and poultry were available they were often undesirable to purchase and among items where quality was not an issue, such as dried goods, almost half showed prices which were higher in poorer neighbourhoods. This is contrary to the findings when all items are included in price calculations. As this study only included medium sized stores, this may have biased the results further in relation to foods being cheaper in less affluent neighbourhoods. Supermarkets have been found to have the most healthy food items at lower prices and these are found predominantly in more affluent areas (Guy & David, 2004; Horowitz et al., 2004; Morland et al., 2002a). Inclusion of larger stores in the Hayes study therefore may have yielded different results.

A National survey of food retailing in Scotland (Dawson et al, 2008) found the relationship between food prices and deprivation to be complex. They found the price of a 'healthy basket' of goods to be variable across store types and areas, with small and medium size stores stocking a proportion of the items surveyed and the large stores were the cheapest. There was no evidence of the most deprived areas being the most expensive however, price rose with deprivation except in the lowest quintile.

Sooman et al. (1993) collected availability and price data on a list of healthier foods, less healthy foods and a list of fruit and vegetables. They found that the healthier basket was more expensive in the more deprived areas but they also found that the fruit and vegetables were less expensive. However, the quality of the fruit and vegetables in the less affluent area were of poorer quality. Lower socio-economic groups are reported to consume less fruit and vegetables (Dibsdall et al., 2002) and poor provision of good quality produce will not promote increased consumption and can rarely offset the lower cost.

This issue of lower price but poorer quality is common (Marcus, 1969; Ambrose, 1979; Sooman et al, 1993; Hayes, 2000; Sloane et al, 2003) and quality must be reported along with price data to construct a complete picture of food access within the area. However, defining and classifying quality is difficult and often only subjective comments by researchers are gathered (Hayes, 2000). Morton et al. (2003) examined an area of deprivation in Iowa (US) and found fresh vegetables to be expensive and limited with consumers travelling out of their neighbourhood to purchase quality meats demonstrating that in some areas the poor must pay more for poorer quality produce or face travelling further to purchase better quality goods.

2.5.4 Rural/Remote Retail Environment

The majority of studies to date have concentrated on urban areas and the associated problems of food access. However, much of the UK features a rural and remote geography with 19% of the population reported to live in a rural area (DEFRA, 2008) and this increases to 29% in Scotland (Scottish Executive, 2000). For those living in remote or rural areas they are often reliant on small local stores for their food shopping. Stitt et al (1995) found there to be a limited availability and a lower quality of fresh produce for those reliant on shopping locally for food. This problem can be exacerbated for those living in rural areas (McKie et al, 1998; Clark et al, 1995) due to poor provision of shops and inadequate public transport (Food Matters, 2003). In a discussion of two studies examining three remote isolated rural locations by Skerrat (1999) it was found those living in these areas regarded the choice of food locally as limited reporting poor quality fruit and vegetables, high prices and a lack of 'special offers' as available in large supermarkets.

Rural and remote areas are unique in that the customer base and number of stores in the area is often small. More mobile consumers and improved road networks in some rural areas mean increasing numbers travel longer distances to reach larger stores with wider variety and choice (Skerrat and McKie, 1997). As more consumers travel out with their local area to shop this can have a detrimental effect on the small

local stores. As their turnover falls, this results in higher prices and a limited range of goods stocked by small retailers, which in turn increases consumer preferences for larger store formats (Byrom and Medway, 2001). A mixed merchandising approach to retailing often seen with small rural shops (Rural Development Commission, 1994) means stores often have multiple functions i.e. post office, petrol station. As a result the primary income for these stores may not be food sales and so they face less pressure to provide a full range of produce. Consequently, food shopping options and choice available in store can be limited especially for those with limited personal mobility constrained to shopping locally, such as the elderly or families with young children.

There has been a decline in the number of small independent village stores as consumers become more mobile and large out of town supermarkets are an attractive option for the 'one stop shop'. However, the village store is thought to play a crucial role in the community and a vital support network (Smith and Sparks, 1997). Research into the viability of small independent retailers in rural areas suggest ways in which the retailers can adapt in order to provide a service suitable for the area and the local consumer: for all purchases if it is the only available outlet (i.e. in rural areas), or as a source of 'emergency' purchase (i.e. the convenience store), or as a destination shop providing specialist products or services (Smith and Sparks, 2000).

In rural and remote areas, tourism has also been found to affect availability of food in stores with product range and opening times increasing during the tourist season. While this may have advantages in that the increased trade can support the small stores throughout the quieter winter months it can also cause problems with only seasonal availability of certain foods and higher prices in summer (Skerratt, 1999). However, an alternative view of tourist contribution to turnover is given by Byrom and Medway (2001) who found retailers perceive visitors to the area as only contributing to a very small proportion of their turnover. It may be the case that tourists do not contribute a lot in monetary terms but if the additional needs of tourists are not catered for by increasing orders this can still lead to frustrations on the part of the consumer when the products they require are not available.

Clark et al (1995) and Skerrat and McKie (1997) looked at food access in remote locations from a consumer perspective while Byrom and Medway (2001) interviewed remote retailers to gain insights into issues of provision from a retailers perspective. Both Clark et al (1995) and Byrom and Medway (2001) carried out their studies in the southern Western Isles (Berneray, North Uist, Benbecula and South Uist) however, Clark also included the islands of Vatersay and Barra which lie further South and can only be accessed by ferry. Both studies reported unpredictable food deliveries to stores when the ferries are cancelled due to bad weather but the reported effect this has on food supplies varies from these different perspectives. While consumers report stock being sold out or unavailable and having to panic buy or 'horde' items, retailers suggest, while this happens, the consumer response is exaggerated and the food will arrive the next day. To prepare for delays in food deliveries, retailers report planning for longer lead times and having a few days' stock in store. Byrom and Medway (2001) conclude that where consumers have identified problems in supply it appears this may be mainly due to poor retail practice than supply problems *per se*. Irrespective of whether it is supply issues or poor retail practice, this translates into poor availability of goods in store causing participants to report sub standard shops and inadequate quality and quantity of food in island shops (McKie et al 1998).

Consumers in remote and rural areas have repeatedly claimed to pay more for food (Clark et al, 1995; Skerrat and McKie, 1997) and this has been substantiated by the findings of the Rural Scotland price survey (2003). A more recent study of price and availability of a 'basket' of healthy indicator foods suggests this may be the case. Rural deprived and island mixed/ deprived sentinels were the two most expensive locations to purchase the 'basket' of goods. This study looked at paired affluent-deprived sentinels in relation to urban-rurality indicators and found those living in deprived rural, island and small town sentinels; all paid a higher price for the basket of goods than their more affluent counterparts. The cost of the basket of goods was £6.07 higher in rural deprived compared with rural affluent, £5.77 higher in the less affluent island sentinel and £4.95 higher in the deprived small town sentinel than its

paired counterpart. However, for the urban sentinels there is little difference in price between affluent (£43.60) and deprived (£43.87) (Dawson et al, 2008).

2.5.5 Food Initiatives

One way in which food availability can be improved in an area is by community food initiatives and there has been considerable growth in numbers and funding over the years. Many of these sell food to the public, most commonly fruit and vegetables. However, the overwhelming majority of these are located in areas of urban deprivation and those located in rural areas face particular difficulties, as populations are widely dispersed and supplies of healthier foods are more limited and more expensive (Anderson et al, 1996). Although the numbers of people these initiatives can reach are limited they can provide an opportunity to improve access to fresh produce and bring other invaluable contributions to the community such as a place for social interaction, volunteer or employment opportunities.

2.6 Individual Issues

2.6.1 Economic

The average UK household now devotes around 9% of its expenditure to food, down from 16% in 1984. But the poorest 10% of households in the UK saw 15% of their expenditure spent on food in 2005–06, whereas the richest 10% spent just 7% (ONS, 2007). Low-income households also spend proportionately more on basic staples such as milk, eggs and bread, which are among the products to have seen the biggest price increases in recent months (Cabinet office, 2008). From January to August 2008 food prices in UK supermarkets increased by 8.3%, with meat and fish increasing by 22.9% and fresh fruit and vegetables 14.7% (BBC News online, 2008). So, increases in the cost of food hit the poorest the hardest which may result in compromises being made in terms of food product selection. Research consistently finds low income consumers substitute fresh fruit and vegetables for more energy

dense food groups, such as cereals and dairy products as they are perceived as less expensive (Giskes et al, 2002; Pollard et al, 2002).

The food shopping budget is often the most flexible part of the household budget and often used for other priorities such as bills. When items are cut from the food shopping it is often fresh fruit and vegetables as these are expensive and regarded as luxuries (Health First, 2000). Store choice decisions can also be influenced by the budget available for food with those with a limited budget choosing to shop at discount supermarkets such as Lidl or Aldi with others avoiding supermarkets as the wide range of produce available was thought to be too tempting and they were more likely to overspend (Wrigley et al, 2004). This may lead them to shop in smaller stores which have been shown to be more expensive and have less availability of healthful foods (Dawson et al, 2008; Leise et al 2007).

In one study of older consumers nearly 50% responded that if they had reduced income they would make a change to their food shopping habits (Hunter et al, 2008). The most common changes were to the types of food purchased with consumers seeking out special offers or cheaper brands. The results suggest that when faced with a lower standard of living, people will make changes to their food consumption habits. Health promotion practitioners should aim to ensure that these changes are well informed, leading to healthy options.

The health benefits of consuming a varied diet, high in fruit and vegetables is well documented and reportedly widely known by the general population (Health Education Authority, 1995). The Wanless report (2004) notes a tendency for lower income groups to discount future health benefits for behavioural change; therefore they are unlikely to make changes to their purchasing decisions if they are perceived to be more expensive for benefits which are not immediate. This 'living for the moment' mentality irrespective of long term health implications are seen within other behaviours known as risk factors for chronic disease. The Low Income Diet and Nutrition Study (FSA, 2007) found the poor diets of the low income population were accompanied by higher levels of smoking, higher intake of alcohol (amongst

consumers) and lower physical activity compared with the general population. Social factors, such as access to cooking facilities and shops did not seem to be a limiting factor in terms of food consumption or nutrient intake, although higher education was associated with better diets.

2.6.2 Gender roles

Shopping, cooking and preparing food is primarily reported as a female role. Greenstein (2000) found married women have increasingly entered the workforce, but no corresponding increase in husbands' responsibility for housework has occurred. As a result of this it has been suggested that women, now more than ever, experience feelings of 'harriedness' and time pressures on a regular basis (Bava et al, 2008), with their daily lives influencing their food provisioning practices. Consequently, Bava et al (2008) found 'trade offs' were used to accommodate the many constraints they faced, including time pressures, unpredictable daily routines and the consequent inability to plan ahead and lack of cooking skills, against preferred food provisioning practices. It is clear these constraints and 'trade off's' compromise choice and therefore an individuals food access. Limited time may lead to the inability to carry out the food shopping if and when necessary, with more need to plan ahead. Time available to prepare meals was again reported to be limited and caused compromises in favour of convenience against ideals of what constituted 'proper meals'.

Elderly consumers are one group who may not face such time pressures and the associated complications in food procurement, however, they have been shown to face different gender specific constraints on their food access options and decisions. Gender roles associated with food procurement and preparation have been shown to inhibit food access for both elderly male and elderly female consumers after the death of a partner. Wylie et al (1999) found loneliness and bereavement to have a negative effect on food intake in their study of elderly people with poor mobility. Reasons given for this reduced food intake included snacking instead of eating proper meals, not wanting to eat the food once it was cooked and wanting to eat in

company. Recently bereaved females often have decrease motivation to eat prepare meals for themselves, while elderly males may lack the skills or confidence to carry out their own food shopping or cook a meal (Lyon and Colquhoun, 1999; Holmes, Roberts & Nelson, 2008). Widowed women in rural areas who have never learned to drive have also been found to have problems accessing stores in areas where there is poor public transport and a declining number of village grocery stores (Rural Development Commission, 1990). All these factors can limit an individual's food access and cause their nutritional status to become compromised.

2.6.3 Cooking/ preparing food

Debate about the state of contemporary domestic cooking skills has intensified in recent years (Short, 2003). An increase in variety and availability of pre-prepared foods coupled with modern technologies are seen as having brought about changes to people's abilities to cook. Some experts argue that domestic cooking skills are in decline, others that they are undergoing a transition.

It is thought the loss of traditional cooking skills have led to an inability to follow dietary guidelines and control diet (Department of Health, 1996; Leather, 1996). Culinary skills and knowledge about the food we cook matter primarily because of the link between diet and health, with a greater food knowledge significantly associated with healthier eating (Wardle, 2000). In 1980, we spent an average of 60 minutes a day preparing food in Scotland. In 2007 the average was 18 minutes (Scottish government, 2008). This limited time can have a direct influence on the foods purchased, preparation methods and ultimately the foods consumed. This reduction in time spent cooking can be attributed to a number of influences including an increase in women in employment therefore consequent reduction in time spent in the home, the increase in availability of convenience food and take away facilities as well as a reduction in cooking skills. Many of these convenience foods are processed and 'less healthy' options. In combination with other factors such as unemployment, low pay, living in poor areas (urban and remote rural) with few healthy food retailers, and low self-esteem due to low socio-economic status, possessing few

cooking skills was shown to contribute to an unhealthy diet (Eat well South Australia, 1999). Lack of confidence in cooking ability can substantially influence food provisioning practices leading to the use of convenience products such as jars of sauce and ready mix gravy (Bava et al, 2008).

Conversely the Low Income Diet and Nutrition Survey (LIDNS, 2007) found most women (91%) and nearly two-thirds (64%) of men reported that they could cook a meal from basic ingredients without help (defined as having 'better developed' cooking skills). The LIDNS also found few significant differences in nutrient intakes between this group and those living in households where cooking skills were less developed. However, whether these skills are put into practice would be an area which should be explored. Individuals and particularly women are keen to adopt the role of homemaker and often aspire to prepare 'proper meals' and eat together as a family (Furst et al, 1996; Marshall & Anderson, 2002). For this reason participants may over report the skills and the practice of such aspirational activities.

As the amount of cooking and time spent preparing meals decreases the opportunity for children to acquire cooking skills from parents are reduced. Bava et al (2008) found those who had not participated in the preparation of meals as children were generally less confident in their cooking ability. These findings suggest it is important for cooking skills to be taught at a young age to ensure maximum choices are available to individuals in terms of food choice. Cooking skills are important not only to increase food choice options but also to facilitate inclusion with many events and social occasions which centre around preparing and eating food.

2.6.4 Culture/ Habit

Cultural influences lead to the difference in the habitual consumption of certain foods and in traditions of preparation, and in certain cases can lead to restrictions such as exclusion of meat and milk from the diet (European Food Information Council, 2005). Whilst sometimes difficult cultural influences are amenable to change, for example, when moving to another country an individual often adopts

particular food habits of the local culture. However, it may be more difficult to change cultural influences when the environment remains the same. Scotland's culture is thought to play an influential role in shaping the Scottish diet and has implications for poor health. At the Food and Health Alliance conference (2007) issues of rising levels of obesity were raised and the need to understand Scotland's food culture and eating habits (Donnelly, Food and Health Alliance 2007), in order to understand the root cause of the problem and enable proposition of solutions.

'Culture always plays a part in defining a healthy diet and in social attitudes ...whether you live on an island or in a city' (Scottish Community Diet Project, 2003, page 3). Traditional food procurement, shopping habits and cooking habits are often deeply imbedded within an individual, household or community. These cultural habits have often been in place for generations and are difficult to change. Different cultures are evident within different areas and communities and are thought to have an impact on health.

In a comparison between the Scottish Health Survey and the English Health Survey, Hanlon et al (2005) found that deprivation scores can no longer explain the differences in mortality rates between England and Scotland. Scottish respondents had a substantially and significantly higher risk of Ischemic Heart Disease with mortality rates in Scotland lagging behind its economic development. They suggest that although material deprivation has improved the psychological and cultural scars remain and it is these factors which impede improvements in health in Scotland. Although sales of fruit, vegetables and fish (including oily fish) are increasing and the nation's health improving there is still a lot of inequality (Scottish government, 2008).

Premature death rates are higher in Scotland than the rest of the UK and there are also regional differences within Scotland. Regional differences in mortality persisted or grew between 1981 and 2001. Male mortality rates in Clydeside (nearly one third of Scotland's population) were 9% above the Scottish average in 1981 and 17% higher in 2001. Male life expectancy at birth in Glasgow was 3.5 years lower than in Edinburgh in 1981, but 5.4 years lower in 2001 (Leyland et al, 2007).

In terms of island communities, historically there were supply issues in terms of regular availability of good quality fresh fruit and vegetables in stores. Islanders were more self sufficient in producing their own food. Although fresh fruit and vegetables have become more readily available in some areas, it can be difficult to break the culture of not eating fruit and vegetables (SCDP, 2003).

White et al (2004) found that factors such as dietary knowledge, health related behaviours (e.g. alcohol consumption), and relative affluence were the key predictor of healthy eating. They concluded that generally less healthy diets were associated with social disadvantage and having poor dietary knowledge. These findings suggest that of barriers of knowledge, culture and skills play a significant role in healthy eating, particularly in more deprived areas.

Traditions and cultural habits are extremely challenging to alter as by their very nature they are well established, habitual and for many subconscious decisions. In order to alter these the Strategy Unit (2008) recognised that community groups, voluntary organisations and social enterprises have an important role to play in supporting activities that promote healthy eating and more sustainable production and consumption. From this it is expected that public debate about food issues will be encouraged and thus promote new social norms that facilitate behavioural and cultural change.

2.6.5 Transport

In both US and UK studies the issue of transport in relation to food access is cited as an obstacle to shopping in the grocery store of choice (Jackson et al, 2006; Morton et al., 2003). The 'car-less consumer' is the most 'at risk' member of the community in terms of food access (Furey et al., 2001). In the UK 16% of people without cars find access to supermarkets difficult, compared to 6% of the population as a whole (Ruston, 2002). People with cars travel further to do their food shopping (Social

Exclusion Unit, 2003), which increases their choice of store and subsequently the range of food items available.

Davies and Champion (1980) (cited Guy & David, 2004) recognised two categories in perceptions of disadvantage. These were;

- 'Disadvantaged consumers' – elderly, people with large families, unskilled manual workers, the sick or infirm and
- 'Neglected consumers' - those with severe mobility problems such as wheel chair users or those who are bedridden and their families.

For many in these groups any distance to shopping facilities without door to door transport would create difficulties in accessing adequate food supplies.

It is these disadvantaged and lower socio-economic groups who face the greatest problems when accessing food shopping facilities. White et al (2004) found more affluent households, in general, live further from the nearest shop but this group are more likely to have access to a car and therefore this distance poses less of a threat to their food security (Office for National Statistics, 2001).

In the US Morton et al. (2003) reported that transportation was frequently an obstacle to shopping in the grocery store of choice and consumers often depend on family and friends a great deal for transportation to grocery stores. These same respondents also reported having to travel out with their neighbourhood in order to purchase more affordable fruit and vegetables and quality meat. It is therefore evident that without adequate access to a car the working poor in these urban neighbourhoods have limited access and affordability issues.

The Social Exclusion Unit (2003) has defined easy access as being within 500 meters of households. As discussed many of the larger stores with better quality, lower cost goods are situated in the more affluent areas (Hayes, 2000; Garret, 2004) and many consumers in the less affluent areas will have to travel some distance to their store of

choice or face limited range and quality at the smaller local stores (Furey et al., 2001).

Accessing stores in both urban and rural areas can be difficult due to the large distances involved in travelling to larger towns in rural areas or to a large out of town supermarket. This can be potentially challenging for those on a low income, with mobility problems or without access to a car and are often reliant on public transport, shopping bus services or private taxis which can be expensive. Elderly consumers have reported reluctance to use public transport due to the inaccessible design of buses and the poor attitude of public transport staff (Whelan et al, 2002). In some remote areas public transport has been described as 'non-existent' with no public transport available or services which do not connect leaving access to food shops in the nearby towns impossible without access to a car (Skerrat and McKie, 1997).

In the UK seventy eight percent of rural settlements do not have a general food store or a small village shop with twenty-one percent of rural households living more than 2.5miles from a supermarket – a distance which would pose a problem for people without access to a car or public transport (Countryside Agency, 2001a, cited Social Exclusion Unit, 2003). Sufficient public transport provision is necessary to provide the consumer with adequate access to shopping facilities however, fifty eight percent of rural households do not have access to a bus stop within a thirteen minute walk with a service of at least once an hour (Countryside Agency, 2001a, cited Social Exclusion Unit, 2003).

Even for those with access to a car, fuel can be expensive and this expense adds to the cost of food shopping. For those living in rural and remote areas this cost can be considerable due to the longer distances which may have to be travelled to access suitable stores and the cost of fuel may be higher in some of these areas. The Rural Scotland Price Survey (2003), found fuel costs to be 6.3% higher in rural areas than in urban areas; 9.7% higher in Highland and Island Enterprise areas and 2.2% higher in Scottish Enterprise areas. This additional cost to travelling to food stores further from home may cause consumers to shop in smaller stores closer to home which may

be more expensive than the larger stores (Dawson et al, 2008). The frequency of shopping trips may also be reduced to minimise fuel costs. This may place further restrictions on the quantities purchased due to limited budgets and the large monetary outlay required for bulk buying. Fresh fruit and vegetables have a relatively short shelf life therefore purchasing large quantities could be wasteful. To be able to purchase large amounts to sustain the household between infrequent trips to the store individuals would require suitable storage facilities in the home. To reduce wastage and increase the time these fresh products will last individuals could pre-prepare vegetables or to batch cook meals using the fresh vegetables and freeze for use at a later date.

2.6.6 Rural/ Remote Consumer

The rural or remote consumer faces many of the same pressures on food access as those living in urban areas with additional problems characteristic of the geographic location. The remote location of households and food stores, limited transport services, employment profile, employment opportunities and the social isolation associated with living in these areas compound problems concerning food access (Scottish Executive, 2007).

Adequate household income is essential in order to allow suitable quality and quantity of food to be purchased in order to provide a healthy balanced diet. Although the Scottish Household Survey found remote small towns to possess above average proportions of skilled manual workers and foremen/ supervisors (18% and 12% in comparison to the national average of 15% and 8% respectively), they had below average numbers of professionals (3% compared with 6% nationally). This would suggest a lower household income and the proportion of the rural workforce on low pay has been shown to be considerable (Scottish Poverty Information Unit, 1999).

One factor which may contribute to this low pay influence are those industries such as the tourist industry and agriculture which are typically low paid sectors and

common in rural Scotland (Skerrat and McKie, 1997). Indeed, Fitch (2004) identifies agricultural workers along with the retired as two social groups who comprise a significant percentage of those who lack access to food.

Employment in these sectors can be seasonal particularly the tourist industry but this also applies to sectors such as fishing resulting in a variable income at certain times of the year. Low and variable incomes can make budgeting for food difficult and food is often the only item in the budget which is flexible. Diet can suffer as a result. Poor rural consumers have also been found to be more apt to shop locally and thus face fewer shopping options (Sullivan and Savitt, 1997).

Evidence suggests that multiple job holding was more common in rural and remote areas (Social Research, 2003) and this can make shopping for food and preparing meals difficult due to a lack of time. By working multiple jobs, which often require shift work and unsociable hours, it can be difficult to access food stores at suitable times. This can be further restricted in remote areas which are often serviced by smaller stores with shorter opening times in comparison to the 24 hour shopping offered by many large supermarkets in urban areas (Dawson et al, 2008).

In rural areas local shops are seen to provide a vital social and community function, particularly for those carrying out their main food shopping locally. These consumers may be the less mobile such as the elderly and those on a low income who lack the ability to travel further to shop (Broadbridge and Calderwood, 2002). However, support for local stores and local produce is strong among rural consumers who are more motivated to source locally produced products when grocery shopping (Vida and Fairhurst, 1999; Curran, 2000).

2.7 CONSUMER

2.7.1 Shopping Patterns

As the food retail environment and consumer demand develops and changes, shopping patterns and shopping behaviour have altered to accommodate contemporary living. There has been an increase in large format stores and out of town shopping facilities and a reduction in small independent stores. Changes in patterns of employment, increases in disposable income and most influentially increased personal mobility associated with car ownership (Dawson, 1995; ONS, 2007) have altered consumer demand. Other factors such as price, value for money, quality and range are all important considerations when consumers are choosing when and where to shop however, 'trade offs' are often made. These trade offs vary between individuals and the purpose of the shopping trip. For example consumers may be more willing to travel longer distances for a main shopping trip in order to access the wider range of produce on offer where as the higher prices paid in smaller local stores may be the trade off for the convenience of shopping locally for a few top up items. Individual preferences and values also influence the trade offs that are made; for example, some people support local retailers because they recognise the social and economic benefits of local stores (Piacentini et al, 2001).

The type of shopping trip plays an influential role in shaping consumer decisions whether it is a main shopping trip or a top up shop with the use of smaller, often independent, stores more commonly associated with top up shopping. In response to increases in top up shopping and planning regulations larger grocery multiples are returning to the high street with smaller format stores such as Tesco metro in recognition of the effects that changing lifestyles are having on shopping habits. A rise in the number of smaller households (which have little need to shop in bulk), increased pressure on leisure time, families eating different foods at different times, lack of forward planning and an established trend towards snacking all contribute to a return to 'top-up' shopping (Research and Markets, 2008).

In examining the factors that influence people's choice of where to shop, a report carried out by Research and Markets (2008) found that a wide choice of produce was more important to respondents than low prices. However, food shopping patterns are generally recognised to be dependant on location related factors. Consumers tend to shop in locations close to the home or those which are easily accessible as part of the working day or other such dual purpose trips (McEachern and Warnaby, 2005). Consumer characteristics such as those in employment, the elderly and families with young children have been found to be typical of certain shopping traits. Households with an annual income of less than £10,000, who do not own a car, single person households, retired/ not in full time employment (Broadbridge and Calderwood, 2002) and more elderly consumers in both rural and urban areas (Bromley and Thomas, 1993; Sullivan and Savitt, 1997) are more likely to shop locally. Moreover, as shopping locally has been shown to be of limited availability and quality this may affect the products available to them (Stitt, 1995).

A study of Scottish rural grocery shoppers' attitudes to grocery shopping and their store choice identified similarities and differences between the factors important to those who shop locally and those who choose to shop further from home, 'outshoppers' (Broadbridge and Calderwood, 2002). Outshoppers are defined as those undertaking their primary food shopping activity outside their local shopping area, while local shoppers are those who travel less than one mile for their main shopping (Jarratt, 2000). All of the shoppers felt a clean store with friendly staff was important and disliked queuing however there were also differences between the two groups. Outshoppers primarily believe they have to travel to the larger stores further from home in order to purchase all the groceries they require and place more importance on range of goods in store. Those who shop locally are more likely to have non – functional reasons for shopping and are more concerned with the location of the store, the opportunity to meet with friends and neighbours and more likely to enjoy the grocery shopping experience. This finding is consistent with that of others who found local stores provide a community and social function (MacKay and Laing, 1982; Smith and Sparks, 2000).

Particularly in rural areas a crucial factor in the decision to shop locally or shop out with the locality is accessibility. Those shopping locally are less likely to have a car and in the older age group (over sixty) (Broadbridge and Calderwood, 2002). Distance to stores or alternative stores is another issue, with the extent of rurality and isolation an influencing factor in the decision making process and has been investigated by McEachern and Warnaby (2006). They recognised the variation in circumstances for stores in areas of relative rurality in comparison with urban or remote areas in the probability of attracting customers and in selecting store stock. Stores in remote areas but within travelling distance of a major multiple are therefore in competition with such stores and face more difficulties in terms of attracting and retaining customers. Distance to large multiples and other retail competition was deemed as a marker for relative rurality and likely to affect the stock available in store for the consumer.

2.7.2 Types of shoppers

Consumers' store choice decisions, the type of stores they choose as well as the decisions they make in store have also been examined and different types of shoppers identified. These shopper types are classified according to consumers' primary driver or constraint on their shopping choice whether that be financial, time or some other social or moral influence.

Piacentini et al (2001) identified six predominant shopper types; apathetic, convenience, economic, smart, ethical and recreational shopper. The first four of these shopper types describe the functional aspects of the shopper but each varies in the amount of time invested in the shopping activity and is identified using the predominant factor which influences their style of shopping. Apathetic shoppers are characterised as those who shop out of necessity and have little concern for the type of store but simply want to find suitable products in the least possible time. Convenience shoppers are more involved but are primarily concerned with saving time and energy, often accepting price-convenience trade offs. Economic shoppers are 'unambiguously directed to the purchase of goods'. Value for money is

important to this group and they pay particular attention to product assortment, price and quality, spending more time shopping and visit multiple stores. Smart shoppers are those who take pride in their ability to get best value for money and take maximum advantage of retailers offers. Ethical shoppers are those who feel they have a moral obligation to types of stores as part of a larger set of values, such as fair trade, organic and animal welfare, irrespective of the increased cost, inconvenience and time involved. To buy fair trade, local or free range makes a statement of personal principles as well as a matter of taste (Cabinet Office, 2008). Recreational shoppers have non-functional shopping motives, they enjoy shopping as a leisure time activity and are prone to impulse purchases.

These categories assume consumers have the options available in order to make these choices and within these shopper types consumers may not always carry out practices which would achieve their main type priority. For example, strict budget shoppers seem less likely to follow shopping practices which would save money long term i.e. shopping list/ shopping around/ bulk buying on offers (Hersey, 2001).

2.7.3 Store Choice, Food Choice

The idea of choice in relation to food shopping and food choice has been examined in several ways from the selection of stores or produce available in the store to the individual factors that are important to the consumer and influence personal choice. The concept of 'choice' is regarded as an act of decision making, with an assumption that choices are not only 'available' but also 'made' (Clarke et al, 2004). The concept of 'choice' assumes that options are available when in fact they may not or may be constrained. In terms of food shopping and food choice the decision is often complicated with some areas having more choice than others and some consumers being more knowledgeable about the options available to them or more able to adapt or access these options, both physically and economically.

In order for consumers to have genuine choices there needs to be competition with retailers competing against each other, striving to improve the services they offer. The most fundamental benefit of having retail choices is that it promotes a feeling of

equitable treatment (Clarke et al, 2004). Those experiencing no choice or limited choice can feel demoralized while having ample choice can empower the consumer and enhance individual' self esteem. Even in areas with abundant food stores Clarke et al (2006) found consumers did not make use of all these choices but restricted themselves to stores which they found culturally acceptable. The idea of choice in relation to food provisioning practices is unlikely to be a 'free choice' but rather constrained, not only by the retail options available to the consumer but also by self imposed constraints and the limitations of every day lives and routines (Bava et al, 2008).

Store choice decisions are shaped by a number of factors many of which are individual to each consumer. The ambiance or reputation of a store has been shown to influence store choice decisions with consumers feeling comfortable with a store due to the store brand, whether that be for associations with quality (Clarke, 2004) or value (Wrigley et al, 2004). The convenience of a store in relation to location or proximity to home or the workplace is often a determining factor of store decisions but store choice decisions can also be shaped by other convenience factors such as convenient parking and a convenient layout of store (Jackson et al, 2006).

Physical access can be the most important factor in store choice decisions of the elderly particularly in relation to top up shopping (Whelan et al, 2004). Amongst more mobile consumers food shopping linked to other activities is a common practice with shopping choices fitted in with other responsibilities, routines and pleasures. Shopping is habitual and lies within the routines of everyday life.

Food choice decisions are often thought of in terms of price or economic considerations but taste, food colour and freshness can be as important as price convenience or availability (Lennernas et al, 1997). Some consumers hold quality as the priority over price, often buying slightly more expensive types of food rather than the cheapest (Whelan et al, 2002). Compromises or 'trade offs' are often made when selecting products. These can be product sensitive in both lower and higher income

consumers i.e. economy line dried goods may be more acceptable for purchase than economy line fresh produce (Jackson et al, 2006).

The influences most commonly cited as affecting food choice in the LIDNS (2007) were price/value/money available for food and quality or freshness of the food. Having more money and/or greater availability of cheaper healthier foods were the factors reported most often that would help to facilitate changes in diet. Price can be more important to retired and unemployed groups (Lennernas et al, 1997) however, many shopping choices are habitual and not sensitive to minor price variations (Clarke et al, 2004)

2.8 COPING MECHANISMS

2.8.1 Introduction

Groups experiencing food access difficulties whether economic or physical often find ways in which to adapt their shopping behaviour, purchasing patterns or food preparation in order to eliminate or reduce the impact of these limitations. This section discusses the ways in which different sectors of the population adapt to their food retail environment and personal circumstances to improve their food access.

2.8.2 Shopping Behaviour

Consumers can adapt their shopping behaviour in several ways in order to improve their access to food supplies. For those experiencing physical difficulties in reaching food stores alternative means of transport is often arranged whether by organising regular lifts from friends and family or using a shopping bus service such as 'dial a bus' (Hare et al, 2001). Those on a low income and the elderly most typically face these types of physical access problems. For elderly consumers with poor mobility supported shopping bus services are vital and enable them to maintain some independence. For those who are no longer able to travel to the store to carry out their own food shopping, a home help service allows the consumer to choose the

foods they require and may enable them to remain in their own home (Wilson et al, 2004).

Younger, more mobile consumers find ways in which to adapt their shopping routine in order to carry out all their food shopping without access to a car. Increasing the frequency of shopping trips purchasing small amounts on a regular basis, walking to stores or using public transport were all methods used to access food for the households (Whelan et al, 2002). Social networks and extended family support with food shopping is important for those without access to a car or with limited mobility in order to be able to access stores further from home or the preferred choice of store.

Low income consumers with a limited shopping budget have been shown to have ways in which they shape their shopping routine in order to manage their restricted budget. Consumers use shopping lists, increase shopping frequency and utilise offers in store to control spending. Attree (2005) identified 3 key concepts concerning low-income consumers and their management of poverty:

1. Strategic adjustment – material adjustment made by families coping with poverty i.e. focused shopping – this is a shopping list for the week to stop impulse buying and shopping around for best bargains but this requires more time and effort
2. Resigned adjustment – material and psychological changes in lifestyle and coping with poverty become accepted as ‘the norm’. Living from day to day with no hope of things improving and so no reason to try. This is a way of surviving poverty.
3. Maternal sacrifice – ‘the good mother’ prioritising her families needs. Anxious to demonstrate they are good mothers these women often go without themselves to provide for their families.

Each of these categories cover a range of activities found to be carried out to improve the households food access situation such as shopping in budget supermarkets (Wrigley, 2004) and skipping meals (Furey et al, 2001). Although consumers report

shopping in budget supermarkets to save money, some suggest this can be a false economy. Food bought because it was perceived to be good value was not eaten or they doubled up on shopping trips because the range of food was inadequate. It was also felt the quality of produce available in these store types was of poor quality (Whelan et al, 2002).

Rural consumers have discussed strategies such as hoarding food and purchasing goods when they are available irrespective of whether they are needed as they may not be available at a later date (McKie et al, 1998). Such purchasing habits have cost implications for the consumer requiring greater expenditure during the shopping trip which is difficult to plan and budget for. Such purchasing can create difficulties for retailers in predicting purchasing behaviour and may cause problems when ordering stock and trying to maintain stocking levels in store (Byrom and Medway, 2001).

2.8.3 Alternative Food Networks

Non-conventional or alternative food networks (AFN) can be 'conceptualised in relation to a globalised 'conventional' food system, where food is transformed and transported across international boundaries within complex and elongated industrial food chains that remove food from their origins rendering food production invisible and primary products unrecognisable to the end consumers.' (Holloway & Kneafsey, 2000). Conversely, food sourced from alternative food networks is largely considered to have been produced, processed and distributed and consumed within a given region or locality without the need for elongated multi actor food chains (Cox et al, 2008). Alternative food networks include farm shops, farmers markets, box schemes and community supported agriculture. Each of these 'alternatives' share a common goal of trying to connect the consumer with the produce and the producer (Holloway et al, 2007). As 'alternative' options the assumption is that something else exists in terms of conventional food retailers.

By using alternative networks such as farmers markets consumers feel they can make personal judgements about the quality and trustworthiness of the produce because of

the personal interaction with the producer (Kirwan, 2004). Quality and freshness factors are inherently associated with such networks and blemishes and imperfections an indication of authenticity and natural nature of the produce. In addition to interest and concerns over the price and quality of the produce purchased from AFN's the human contact aspect of the purchase with relationships between the producer and consumer being built. This relationship and the sharing of information build a sense of community with participants developing loyalty to the producer. These relationships are often secondary to the initial reason for choosing using an AFN but the loyalty which develops as a result of the personal relationships and contact with the producer make the decision to stop purchasing from them more difficult (Cox et al, 2008).

Consumer decisions to purchase goods from alternative networks are often linked to quality and freshness but can also be a lifestyle choice and linked to ethical considerations and a larger set of values such as fair trade, food miles and animal welfare (Weatherell et al, 2003). As such decisions to purchase products from alternative networks are usually conscious choices rather than through necessity. Those choosing to use alternative networks such as farmers markets are more commonly affluent consumers (Weatherell et al, 2003). However, this may depend on the type of alternative food network being used as others (Cox et al, 2008; Kneafsey et al, 2007) have found most participants using AFN's to be interested in the cost of their food and household incomes of those using the schemes to vary and are not restricted to the middle classes.

2.8.4 Sharing Food

In order to provide food for those suffering food security issues charitable organisations have historically provided food in several forms such as soup kitchens and food pantries. Such services have been shown to provide good quality and nutritious meals (Biggerstaff et al, 2002; Wicks et al, 2006). However, they can not provide enough food for all those who need it and although they deal with the problem they do not provide a solution for food poverty and food insecurity.

Some communities who have suffered food insecurity have set up collective kitchens. These are small groups of people who pool their resources to cook large quantities of food. Participants in such groups cook large quantities of food and share this food amongst the group. Such a scheme has been found to increase food resources available to an individual, decrease psychological stress associated with food insecurity and increased dignity associated with not having to access charitable resources to feed their families (Engler-Stringer & Berenbaum, 2007).

Such schemes have been shown to enhance coping skills and provide social support but are not a long-term solution to food insecurity (Tarasuk & Reynolds, 1999). Although these types of schemes should not be relied upon to solve food insecurity sharing food items and/or meals can provide a short-term solution to irregular availability of foods as a result of household economic constraints or product availability in store.

2.8.5 Barter

The practice of barter has declined since the development of modern food systems. As production moves away from small scale, limited production and distribution takes place within local boundaries with exchange governed by kinship and other social networks to an international market with access governed by money and markets (Breadsworth & Keil, 1997). However, there may still be a place for barter systems in the food system.

Family food production systems are found in most regions of most countries worldwide. These systems can be carried out through necessity or a desire to produce food for the household. Traditionally, gardeners would feed their families first and then sell, barter or give away surplus garden foods. Home produced food can contribute towards household food security and nutrition by providing direct access to diverse foods that can be harvested, prepared and fed to family members, often on a daily basis (Marsh, 1998). Excess produce can be sold to provide an income or can be bartered for other foods not produced in the home or services.

2.9 Conclusions

From the literature reviewed in this chapter the multi faceted nature of the food access problem is illustrated. The literature fails to provide a definition for the term food access and this in itself poses problems for investigating and measuring the scale of the problem. This review discusses the problem at national, local and individual levels and the ways in which this problem has been investigated and some of the proposals for rectifying the food access problem such as retail planning, store management and supporting consumers by providing transport links to stores.

The concept of choice is highlighted as an important factor in all aspects of consumers' food procurement, from store choice decisions to cooking and preparing food. This notion of choice is one which is assumed to exist with options available to the consumer however this may not always be the case, particularly in remote communities (Skerrat, 1999).

The ways in which consumers adapt to the food retail environment are also discussed and include altering shopping practices, food management within the home and finding alternative food supply networks and producing food for the household. These adaptations are ways in which to ensure food is available in the home but for some are also lifestyle and ethical choices. Again this notion of choice in these decisions arises and it is again assumed that there are other options available.

Much of the literature focuses on food retail provision from the store perspective in terms of what is available and mapping provision. Less is known about how retail provision is perceived by the consumer, how it impacts on consumer food choice and what happens between the store and the home. From the findings of this literature review, chapter three will discuss the main objectives of this study and the methodology used to achieve them.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the research objectives and methods used in this study to explore consumer perspective on food access and its impact on their food choice in remote Scottish communities. It discusses recruitment, sampling, data collection and the multi method approach used and provides justification for the research design. The aims of this project intend to complement those of a National Survey (Dawson et al, 2008) by comparing the food access data from the national project to the perceptions consumers have of food access in their area. In doing so the research moves the investigation beyond the retail store and into the home.

3.2 Research Objectives

This study aims to improve our understanding of and how food access impacts on food choices by investigating consumers' food shopping experiences and food choices between the retail store and the home, in a remote community. The research has three objectives:

1. To explore how food access issues impact on consumers food shopping choices (specifically low income households)
2. To understand what contribution food access makes to the poor dietary choices of consumers
3. To describe consumer coping mechanisms used to deal with food access issues

In reviewing the literature it is apparent that research into food access has focused on price and availability data at store level, types of shoppers, consumer perceptions,

knowledge and skills. However, little is known about what happens between the store and the home, an area this study aims to address.

This study was funded by the Food Standards Agency Scotland (FSAS) to complement a National Survey on food availability and price in Scotland (Dawson et al, 2008), also funded by FSAS. Understanding the food access issues of those living in a deprived rural or remote location were key objectives set by the funding body therefore this was incorporated into the study design. In order to utilise National Survey data the area chosen for this study was also used in the National Survey.

In order to explore the relationship between deprivation and poor health, in relation to food access, this study was undertaken in an area of relative deprivation as indicated by the Scottish Index of Multiple Deprivation (Scottish Index of Multiple Deprivation (SIMD), 2006). Links between deprivation and poor health are long established (Scottish Office, 1993; Scottish Executive, 2005) as are the links between poor diet and ill health (Scottish Office, 1993) with food access issues implicated as contributory causative factors (Scottish Office, 1996). However the relationship between these factors and food access remains uncertain.

A remote deprived area was chosen as the study area in which to conduct data collection and explore the relationship between these factors and food access. While Scotland has a diverse geography previous research in the UK (Cummins et al, 2002; Guy and David, 2004; White et al, 2004; Wrigley et al, 2003) and the USA (Hayes, 2000; Morland et al, 2002a; Morton, 2003) has centred largely on urban settings. However, rural and remote areas have many geo-specific problems in terms of food access i.e. physical distance to shops/ increased delivery time and costs as well as social problems such as isolation and an aging population. Anderson et al (1996) reported that a remote area is likely to face particular difficulties as populations are widely dispersed and supplies of healthier foods are more limited and expensive. The FSAS Diet and Nutrition Strategy (2003) also recognised that those in rural areas may suffer similar problems to those in urban areas such as availability of

stores and range of products stocked, some of which may be compounded by the remote locations and isolation.

The remote nature and independent position of the Scottish islands provide a unique opportunity to assess the influence local retail provision has on food choice without the same opportunities for out shopping that might be available to those on the mainland. Outshoppers are defined as those undertaking their primary food shopping activity outside their local shopping area, while local shoppers are those who travel less than one mile for their main shopping. (Jarratt, 2000). The Western Isles (Eilean Siar) was the Scottish island group chosen for this study as these were the most deprived island group included in the National Survey. The National Study classified sentinels by urban-rural classification (Scottish Executive, 2003-2004) and deprivation (using the Scottish Index of Multiple Deprivation (SIMD), 2006) (Appendix 1). Eilean Siar has a median SIMD decile of 7 and in the six-fold urban-rural classification all parts of all islands are classified as remote. Full discussion of sentinel classification and selection can be found in FSAS research project S04005 (Dawson et al, 2008). Whilst it could be argued that results from an island community could not be generalised to other mainland communities it is the relationship between food access issues and consequent food choice in remote communities that is being investigated.

The main aim of this study is to better understand if and how food access relates to food choices. In order to understand what contribution food access makes to the dietary choices of consumers and their perceived access to healthy foods this study will explore how food access impacts on consumers' perceptions and behaviour in relation to food choices.

Food choice is influenced by a multitude of physiological, psychological, cultural norms and learnt behaviours (Fieldhouse, 1988; Gibson, E.L., 2006; Koster, E.P., 2007) as well as the actual availability and affordability of food items (Sooman et al, 1993; Horowitz et al, 2004). While in depth explorations of these factors are beyond the scope of this study it will identify some factors, such as culture, tradition,

knowledge and skills surrounding the procurement and preparation of food, relevant to consumer food choice in achieving a healthy diet.

Previous research (Clark et al, 1995) reported the use of ‘coping mechanisms’ such as hoarding and a siege mentality by consumers in order to deal with food access issues. In recognizing the presence of these types of behaviour this study will also describe the mechanisms consumers use to deal with food access issues where these are seen as problematic. By describing these mechanisms it will highlight their significance in consumers’ food access experience.

3.3 Philosophy of Research

In line with the research objectives defined above, this study was undertaken within the interpretive perspective to understand and acknowledge the importance of the social context of the study (Burger, 2007) and the meaningful nature of peoples participation in social and cultural life (Seale, 2004).

In order to explore, understand and describe food access from the consumer perspective, phenomenological research was employed to allow an understanding of the ‘constructs’ people use in every day life to make sense of their world and uncover the meanings contained within conversation (Richie and Lewis, 2005). The purpose of the phenomenological approach is to identify phenomena through how they are perceived by participants in the situation. This is achieved through gathering ‘thick description’ (Denzin & Lincoln, 1994) and perceptions through qualitative methods such as interviews. This approach emphasises the importance of personal perspective and interpretation. As such they are powerful for understanding subjective experience, gaining insights into people’s motivations and actions, and cutting through the clutter of taken-for-granted assumptions and conventional wisdom (Lester, 1999).

Mixed methods, combining qualitative and quantitative, were used to build a picture of participants’ food shopping experiences. Using a variety of research methods

provides several advantages. Through multiple methods, different kinds of data are collected, each set of which might provide partial information needed for a complete picture, thereby strengthening the robustness of research results (Kaplin, 2005).

3.4 Time Frame for Study

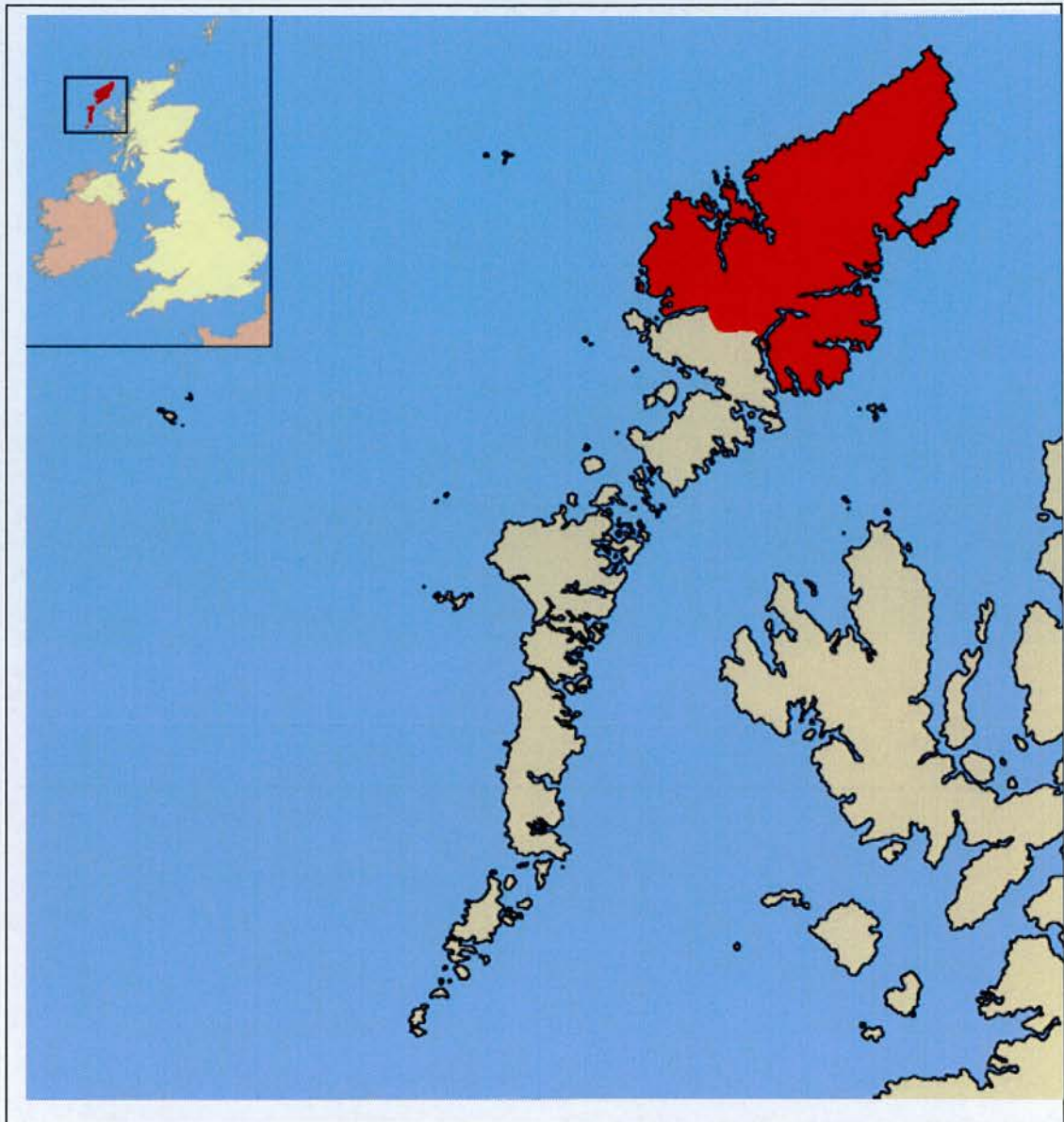
To achieve maximum recruitment and participation during the data collection periods a number of factors were taken into consideration when planning fieldwork times. Within the area selected for study, tourism plays an important part in the local economy. The main tourist season runs and lasts from April to October and could impact on the research in two new ways. Firstly, during the summer tourist season there are more ferries which has an impact on the availability of foods within the stores. It has been documented that during this time, shops in rural tourist areas are better stocked and can carry a wider variety of items due to increased turnover (Skerrat and McKie, 1997). While access to foods and individuals perceptions of food access is more favourable, the actual tourist season is relatively short and this period may not be representative of 'normal' food access. Moreover, locals are competing with tourists for access to the foods available in stores during this period. Secondly, for those in the study sample a period out of the tourist season is likely to be more favourable as children will be at school and those in the tourism industry will be quieter and therefore more likely to participate in the study.

The national survey of food retailers was carried out in the autumn of 2005 and spring of 2006 so in order for these results to be compatible with the findings of this research field work was carried out within a similar time frame (i.e. autumn 2006 and spring 2007).

As discussed, the area chosen for study was in the Western Isles which lie off the west coast of Scotland. Map 3.1 shows the position of the Western Isles in relation to the rest of Scotland. The Western Isles are marked in red in the insert picture as is Lewis in the main picture. There is only one large town in the Western Isles and this is Stornoway in Lewis and has a population of approximately 5,600. Almost 30% of

the total population of the Western Isles, some 8,000 people, live within Stornoway or the immediate vicinity (Western Isles Council, 2001). The remaining population is scattered throughout over 280 townships.

Map 3.1 - Map of Scotland showing position of Western Isles



Due to the geographical nature of the study area, data collection was carried out in two phases. Phase one of the data collection was carried out in the Southern Western Isles over a thirteen day period during October 2006. This area encompassed seven island groups namely; Vatersay, Barra, Eriskay, South Uist, Benbecula, North Uist

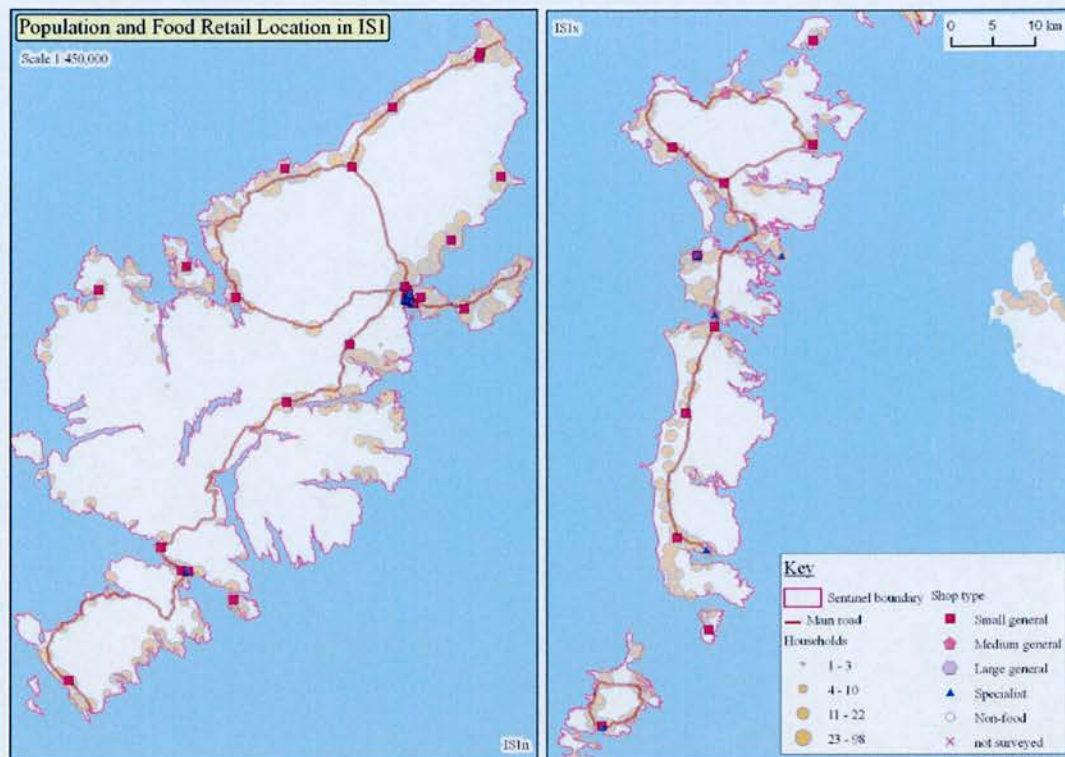
and Berneray. Phase two took place in the Northern Western Isles of Lewis, Harris and Great Bernera over a seven day period in March 2007. Table 1 below shows the population of these islands

Table 3.1 – Island Population (General Registrar of Scotland, 2003)

Northern Western Isles	Population
Lewis	18252
Harris	1662
Great Bernera	233
Southern Western Isles	
Vatersay	94
Barra	1078
Eriskay	133
South Uist	1818
Benbecula	1249
North Uist	132
Berneray	136
Total	24,787

Map 3.2 shows the islands in more detail with the main roads, type of store and their location and the population density throughout the islands. The left hand box shows the northern half of the western isles, i.e. Lewis (including Great Bernera) and Harris. The right hand box shows the southern half of the western isles. From north to south these are Berneray, North Uist, Benbecula, South Uist, Eriskay and Barra (including Vatersay).

Map 3.2 - Western Isles showing main roads, population density and store type/location



3.5 Sampling

The relatively small population of 24,787 (see table 1) represented in the study area posed specific recruitment challenges. Although probability sampling is generally held to be the most rigorous approach to sampling for statistical research it is largely inappropriate for qualitative research (Ritchie & Lewis, 2005) for which non-probability samples are more commonly used.

Purposive sampling i.e. snowball (Patton, 1990) was used to target specific groups such as elderly, single parent, larger families, one-person households and the disabled. Participants were recruited using a variety of sources including advertising in a local newspaper, schools, community groups, churches etc (Appendix 2). From initial contacts a snowballing technique was used to recruit a sufficient number of research subjects.

Snowball sampling starts with a few informants, who pass researchers on to other individuals whom they personally know (Lupton and Tulloch, 2002, cited Payne and Payne, 2004). From initial contacts gained through advertising in local papers and groups, the snowballing method was used to reach the target population as it is a particularly useful approach for dispersed and small populations (Ritchie and Lewis, 2005) and has been successful in similar geographical areas (McKie et al, 1998; Skerrat, 1999). As the aim of this study is primarily explorative, qualitative and descriptive, then snowball sampling offers practical advantages, as a sampling method it is relatively cheap and can produce in-depth results and produce these relatively quickly (Atkinson and Flint, 2002).

Sampling methods can be either ascending or descending. The fundamental difference between the two approaches is that the descending method chooses a sample; the ascending method constructs a population (Rothenburg, 1995). Traditional techniques such as household surveys, are 'descending' strategies, and associated with a largely quantitative tradition of the measurement of social problems that often suffer from a lack of responses from particular groups, often the young and unemployed males (Atkinson and Flint, 2002). Snowballing as an ascending methodology, can be used to work upwards and locate those on the ground who are needed to fill in the gaps in our knowledge on a variety of social contexts (Atkinson and Flint, 2002; Piacentini et al, 2001). By using this type of ascending methodology for this study, specific populations can be located and targeted in order to gather more comprehensive data and answer the specific research questions asked.

There are however disadvantages to snowball samples. As snowball sampling relies on the assumption that social networks consist of relatively homogenous social traits when some groups may themselves consist of highly atomised and isolated individuals whose social networks are relatively impaired recruiting sufficient numbers may prove difficult (Atkinson and Flint, 2002). In using this method there can be problems of representativeness, as new sample members are generated through existing ones, there is clearly a danger that the diversity of the sample frame is compromised (Ritchie and Lewis, 2002). Initial sample members were recruited from various sources (Appendix 3) to reduce the sampling bias in this study. Each

respondent was asked to identify other possible individuals within both a similar household type and other types in order to increase the validity of the sample.

3.6 Insider/ Outsider Issues

It is suggested that techniques of 'chain referral' such as the snowballing technique used in this study may imbue the researcher with characteristics associated with being an insider or group member (Atkinson and Flint, 2002). In this instance this may have been useful in recruiting respondents for the study. Kusow (2003) suggests insider/ outsider roles are products of the particular situation which a given fieldwork takes place and not from the status characteristics per se of the researcher. Where this implies it is possible to become an 'insider' during the process of research fieldwork McGinn (2005) warns of researchers exaggerated claims of becoming insiders. Being friendly, building trust, establishing a comfortable setting for research participants are important but they are insufficient to turn outside researchers into insiders.

Gender of the researcher is one characteristic which may imbue the researcher with insider disposition or affect the interviewee's response in some way. Kane and Macaulay (1993) found that both male and female respondents are at times affected by interviewer gender. However, these differences are commonly found when discussing 'hot topics' such as gender inequality. This study, whilst a topic applicable to all and one most have an opinion on, is unlikely to evoke a guarded or exaggerated response from either male or female respondents. Viewed as conversations, the gender of the researcher could affect interviews since there are reported differences between the male and female response. Tannen (1990 page 25, cited; Kane and Macaulay, 1993) suggests that men view conversations as requiring them to 'protect themselves from others' attempts to put them down and push them around while women are more inclined to view conversations 'as negotiations for closeness in which people try to seek and give conformation... and to seek consensus'.

Those primarily responsible for the household food shopping were recruited for interview; yielding a majority of female respondents. Although the researchers female gender may not necessarily affect interviewee response, the same sex interviewer/ interviewee relationship may have promoted a positive rapport as Aris (1976, cited; Kane and Macaulay, 1993) notes that women prefer talking to women because they have greater freedom and autonomy in same sex conversations.

Whilst establishing positive relationships within research sites is a necessary aspect of undertaking a research study, in order to fully and accurately report the findings of this study the researcher must achieve a certain degree of distance from the research materials and represent them fairly and give them a voice independent of that of the researcher (Strauss et al, 1998).

3.7 Recruitment

The target population, shown in table 3.2 and 3.3, was set to represent a cross section of the island population including different incomes, ages and household compositions. In order to recruit these different sectors of the population letters were sent to groups that should contain representatives of these groups (see appendix 2). The study aimed to recruit 40 participants over the two phases of data collection for interview and 8 focus groups.

Table 3.2 - Target population (interviews n= 20) for each phase

Income	Age	Household
High Income	Young <65	Single (2) H'hold children (2) Empty nest (2)
	Old >65	Single (2) H'hold children (2)
Low Income	Young <65	Single (2) H'hold children (2) Empty nest (2)
	Old >65	Single (2) H'hold children (2)

Table 3.3 – Target population Focus groups (4) in each phase

LOW INCOME GROUP Single and couple person households Older consumers >55 Male and female	HIGH INCOME GROUP Single and couple person households Older consumers >55 Male and female
LOW INCOME GROUP Households with children Younger consumers <55 Female and Male	HIGH INCOME GROUP Households with children Younger consumers <55 Female and Male

A total of 61 participants were recruited. There were 35 participants in phase one, 5 in one focus group and 30 individual interviews. In phase two there were 26 participants recruited for interviews.

3.7.1 Phase 1

The initial recruitment process began by completing an internet search of groups and organisations within the Southern Western Isles, such as lunch clubs, disabled support groups, mothers and toddlers groups, schools, church groups and sports clubs. From this initial search a list of contact details of these groups was compiled. Letters were sent to each of these groups/ organisations (n=36) and where an e-mail address was available they were also contacted by e-mail (n=16) (however n=11 of these e-mail accounts were no longer active and the message returned).

An advert for participants was also placed in the September issue of the monthly local community newspaper, ‘Am Paipear’, available throughout the Southern Western Isles, approximately 3 weeks prior to fieldwork commencing, however this yielded no response (Appendix 3). On speaking to participants, who later took part in the study, about why they did not respond to the advert said they didn’t think it referred to them or that keeping a diary put them off. However, no one seemed to mind completing the diary when asked. Some thought it was connected to another

article on the same page so didn't bother to read it (the advert was on the same page as information about the Whole Food Co-op).

From initial contacts the non-probability method of snowball sampling was used to increase the sample size. From initial contacts gained through contact with groups and referred individuals the snowballing method was used to reach the target population.

From the initial letters sent, three replies were received – one via e-mail and 2 phone calls (one reply received during fieldwork and unable to follow up due to lack of time). From the other two replies the information was passed on to members of each organisation (Church group and Womans group) and one participant from each group was recruited.

From these initial letters, e-mails and phone calls, referrals were obtained primarily from phone conversations and were followed up by letter (n=2), e-mail (n=40) and phone (n= 23) dependant on individual preferences, in some instances phone calls were supplemented with further information by letter or e-mail.

From the initial e-mails sent one reply was received from a member of a womans' group who subsequently circulated information about the study and an advert for participants via their member e-mailing list (n=40) to which one volunteer was recruited (e-mail reply). The e-mail was also passed on to a local GP who is involved with the Whole Food Co-op (www.uistwholefoods.com) who replied and forwarded the e-mail on to the members of the Whole Food Co-op which resulted in a focus group (n=5). A phone conversation with this GP resulted in several more names (n=2) and numbers of people to contact (main source of contacts – Health Promotion Leader) and from this the snowball effect took place. By far the best recruitment method was referral by someone the individual knew and trusted.

Table 3.4 – Phase 1, Recruitment response and referral

Method	Initial Response	Snowball Referral	Snowballing Participant Referral	Snowballing Participant Referral
Letter (n= 36)	Church Group Community Council	n=1 n=1		
E-mail (n= 16)	Health Professional Womans Group GP Health Promotion	n=1 n=1 n=2 n=7	n=1 n=5 n=4	 n=2 n=4
Approached during fieldwork		n=1		

3.7.2 Phase 2

As use of the snowballing technique and direct contact via e-mail or telephone were the most effective methods of recruitment during phase one these were also used to recruit participants in the second phase. From contacts made during phase one of data collection, names and contact details of possible participants and professionals who could provide further referrals in Lewis/ Harris were obtained (E-mail n= 2, Phone n= 4). An internet search of local groups and organisations in Lewis and Harris provided further contact details and these were contacted by: E-mail n= 3 and phone n= 6.

Seven interviews were arranged prior to fieldwork commencing in phase 2 with contacts arranging further possible participants and plans to use snowballing for further recruitment once there. However, some of these contacts fell through and more work on recruiting participants was required on arrival in the study area.

Table 3.5 – Phase 2, Recruitment response and referral

Method	Initial Response	Snowballing 1st Referral	Snowballing Participant Referral	Snowballing Participant Referral
E-mail (n=5)	n=0			
Phone (n=10)	Health Professional Lecturer From phase 1	n=1 n=1 n=1	n=1 n=1 n=3	n=2 n=4
Other Approached during fieldwork	Health Promotion Health Promotion Community Worker 1 Community Worker 2	n=1 n=3 n=1 n=1	n=1 n=4	n=1

3.7.3 Recruitment Difficulties and Managing Participants

Initial recruitment of participants via phone, letters and e-mails yielded a small number of contacts (n=9) and from here the snowballing technique was used. This method worked very well but is time consuming and requires diligence to manage once in the field. Phase one of the data collection took place over 13 days and during this time 30 interviews and one focus group were conducted, phase 2 took place over 7 days and 26 interviews were conducted.

Several factors contributed to phase two being more time efficient than phase one:

The geography of the two areas was particularly important when considering drive times and organising the locations of interviews. Five islands were covered during phase one, one of which required a ferry journey for access. Of the other four islands in phase one there was more referral between islands requiring long drive times, whereas participants in phase two tended to refer to others on the same island. Three islands were covered during phase two, allowing for shorter drive times between interviews.

Phase one interviews were more dispersed across various locations with greater drive times compared to those during phase two. More of the phase two interviews were arranged in the field with consequently shorter drive times between locations and interviews clustered with a logical route planned.

During phase one of the data collection contacting participants was made more difficult due to limited mobile phone network coverage, therefore follow up calls or rearranging times to reorganise interviews was difficult and often impossible. During phase one, 1 participant cancelled on my arrival and 2 were not in at the arranged times and could not be rescheduled.

3.8 Research Methods

Several research methods were used in this study. Triangulation is the combination of methodologies in the study of the same phenomenon (Denzin, 1978; cited Jick, 1979). This combination of methodologies or mixed methods approach was adopted for this study as it has been suggested “the use of different research methods within a single study can provide a richer and deeper understanding of the area under investigation than would otherwise be possible” (Corner, 1991). By using several data collection techniques the research questions are approached from varying perspectives addressing areas which may not be apparent using only one or two methods. Rather than using this approach to corroborate findings, the classic use of triangulation to establish validity, it is used in this study to allow elaboration, as the variety of data expands understanding of the phenomenon (Blaikie, 2006). In using triangulation a picture of the complex problem can be built and by triangulating results from the various data used in this study the researcher can attempt to construct explanations for the phenomenon.

To complement data gathered in this study, Data from a national retail survey (Dawson et al, 2008) was also incorporated to establish actual availability of a range of healthy foods. This provided a broader picture of food access and was used in a reflexive way to strengthen the analysis and findings. By using data from the

national project, consumers' perceptions of food access can be verified or will be shown as unjustified.

Use of both qualitative and quantitative methods were employed in order to generate a broad picture of participants' food access experience and answer the research objectives. There is much debate in social research about whether qualitative and quantitative approaches should, or even can, be combined (Richie and Lewis, 2005). Some others discuss how and why the two can be combined and the strengths of the two approaches in combination (Barbour, 1999; Morgan, 1998; O'Cathain et al, 2007). In the study of food choice Koser (2007) suggests that some aspects are subconscious and as such things may be missed using only qualitative interviews but can be identified using quantitative measures. Subconscious decisions, small shopping trips or snack food choices may be forgotten or overlooked during recall or interview but are more likely to be recorded using a quantitative method. By employing different methods and combined use of qualitative and quantitative methods, the goal is to use each method so that it contributes something unique to the researcher's understanding of the phenomenon under study (Morgan, 1997).

3.9 Data Collection Methods

Five different data collection methods were used namely; focus group, semi-structured interviews, shopping diaries, cupboard surveys and food frequency questionnaires.

Focus groups and semi-structured interviews were chosen over other qualitative methods as these allowed the interviewer to steer the direction of the discussion while allowing enough flexibility to ensure that the experience of participants could be fully explored. Some of this detail may not be apparent using more structured methods such as structured interviews (Klandermans & Staggenborg, 2002).

Quantitative methods were used in order to provide a behavioural context to the experiences of the participants, quantify and support quotes from the qualitative methods (Tashakkori & Teddlie, 2003).

These qualitative and quantitative methods were use in combination to answer the research objectives (Table 3.6).

Table 3.6 – Research Methods

Research Objectives	Research Methods
To explore how food access issues impact on consumers food shopping choices (specifically low income households)	Focus Groups Interviews Shopping Diaries
To understand what contribution food access makes to the poor dietary choices of consumers	Focus Groups Interviews Cupboard Surveys Food Frequency Questionnaires
To describe consumer coping mechanisms used to deal with food access issues	Interviews Shopping Diaries Cupboard Surveys

3.9.1 Focus Groups

The methods used to conduct exploratory research need to be flexible (Blaikie, 2006) in order to obtain an adequate understanding of the sector of social life being investigated (Bulmer, 1969; cited Blaikie, 2006). To allow flexibility in the direction of the research and ensure appropriate issues are explored focus groups were to be carried out in the first instance. This method utilizes the group interaction to produce data and insights which would be less accessible without the interaction found in the group (Morgan, 1997).

These focus groups were to establish the context of the research and develop questions or concepts which should be pursued further within the research process. Typically, focus groups involve around six to eight people brought together to discuss a specific topic predetermined by the researcher. The researcher uses the group process to encourage open, interactive discussion, but also controls it to bring everyone in, prevent dominance, and steer the group away from irrelevant areas (Ritchie and Lewis, 2005). Both the strengths and weaknesses of focus groups flow directly from the reliance on the researcher's focus and on the group's interaction (Morgan, 1997). The researcher must facilitate the group ensuring the discussion remains relevant to the area of study, including all group participants and each participant should be an active member of the discussion.

Focus groups are synergistic, data are generated by interaction between group participants. As discussion progresses individual response becomes sharpened and refined, and moves to a deeper more considered level (Stewart and Shamdasi, 1990; cited Ritchie and Lewis, 2005). This interaction enables participants to ask questions of each other, as well as to re-evaluate and reconsider their own understandings of their specific experiences (Gibbs, 1997).

Another benefit is that focus groups elicit information in a way which allows researchers to find out why an issue is salient, as well as what is salient about it (Morgan 1988; cited Gibbs, 1997). This may be particularly important in determining the relationship between consumers' attitudes/ beliefs about food access and their actual actions and food choice behaviour. If multiple understandings and meanings are revealed by participants, multiple explanations of their behaviour and attitudes will be more readily expressed (Gibbs, 1997).

3.9.1.1 Potential drawbacks of focus group

A potential problem with focus groups is controlling the content of the discussion. As food and shopping is a subject most individuals are involved in, it is likely there will be a wide variety of issues raised and discussed. It is the responsibility of the researcher to ensure the discussion remains focused on the topic without hindering or disrupting the flow of the discussion.

Whilst the group perspective is less influenced by interaction with the researcher than it might be in a one-to-one interview the individuals in the focus group may be influenced by the group context or the majority opinion of the group and the researcher must ensure reflexivity to observe and note these possible affects (Ritchie and Lewis, 2005).

3.9.1.2 Recruiting for focus group

As anticipated, recruiting focus group participants in such small populations was problematic and consequently only one was carried out during the first phase of data collection. Recruiting focus group participants in such a small and dispersed population can be problematic as potential numbers are low, the distances between homes and places of work can be quite large therefore getting a group together at a convenient time and place can be difficult. Discussing topics in such small communities can also be difficult as individuals may not want others to know their opinions or may not feel free to discuss sensitive matters in front of neighbours, work colleagues etc. This group all had a particular interest in food and healthy eating in particular as they were all members of the Uist Whole Food Co-op (www.uistwholefoods.com), which suggested they may not, as a group, be representative of the general population. However, it was decided to conduct the focus group with discussion allowing the researcher to become familiar with the geographical area and issues pertinent to the area in relation to food access, gaining insight into local perceptions/ routines/ traditions and possible topics for further exploration. The focus group was used to provide background information before carrying out interviews as focus groups are useful for 'researchers wishing to orientate themselves to a new field' (Longhurst, 2003; cited Hopkins, 2007) and can enhance the role of research participants in regulating the research findings (Hopkins, 2007).

With such a poor response and following discussion with an islander currently living on the mainland, who advised one to one interviews would be more appropriate for the area and favourable for recruitment; the study design was amended to focus on individual interviews. Although the number of focus groups planned was not

achieved, inclusion of the one group recruited proved very constructive. The focus group was conducted at the beginning of the data collection period prior to the majority of interviews; this provided good background knowledge of traditional shopping habits and cultural activity. Some history about the stores on the island past and present was also discussed and from this the researcher gained a perspective on the changes and progress in recent years in relation to food shopping options. This allowed the researcher to have more knowledge of the area, the stores and the people providing a good basis and some shorthand language (i.e. historical names of stores still used although they have changed ownership) from which to conduct interviews. It is important for the researcher to be fully informed about the context of the situation in order to achieve a maximum outcome from the individual interviews hence constructing a broader picture of the issues and the relationship between food access and consequent food choices.

3.9.2 Semi-Structured Interviews

Rubin and Rubin (1995) describe interviews as “guided conversations” which aim to deeply explore the respondent's point of view, feelings and perspectives (Guion, 2001). Individual interviews were chosen as this research sought to examine the issue of food access from the consumers perspective and get an idea of individuals perceptions of food retailing in their area, how they used these services and the problems or adaptations they used in order to provide food for their household. This personal account could be best explored with the use of individual interviews which allowed in depth discussion of topics which were of particular relevance to each individual; something which could not be achieved within a focus group setting.

An interview schedule including topics of interest uncovered from the literature and pilot interviews provided the researcher with a structure for the interviews. However, this was used only as a guide to ensure the necessary topics were covered but remained flexible with the order of discussion and topics probed further guided by the participant and their experiences. Qualitative interviewing is one way of uncovering and exploring the meanings that underpin people's lives, routines, behaviours and feelings (Rubin and Rubin, 1995). Interviews are said to be a way of

exploring relationships between different aspects of a situation (Asksey and Knight, 1999). In this study interviews were used to explore individuals' perceptions and meanings of food access issues to understand how these contribute to poor dietary habits.

As with focus groups, semi-structured interviews also require flexibility in the method - this does not mean there is no direction to the enquiry; it means that the focus is originally broad but becomes progressively sharpened as the inquiry proceeds (Blaikie, 2006). Individual interviews allow the topics discussed to be steered by the researcher but driven by the respondent in order to "increase understanding of the reasons or accounts social actors give for their actions" (Blaikie, 2006).

Again, the role of the researcher is central to achieving the interview objectives. The interviewer needs to interpret what is heard, as well as seeking clarity and a deeper understanding from the respondent throughout the interview. In essence, in-depth interviews involve not only asking questions, but the systematic recording and documenting of responses coupled with intense probing for deeper meaning and understanding of the responses which allows the researcher to achieve greater comprehension of the situation (Guion, 2001). Interview data, like any other, must be interpreted allowing for the context in which the 'conversation' took place and the researcher must consider the implications of their presence (Hammersly and Atkinson, 1995).

3.9.3 Shopping Diaries

Interviews were used to construct a picture of participants' routines in regards to food shopping and describe the coping mechanisms used by consumers to deal with food accessibility and affordability problems. In order to explore participants' actions and what they do on a daily basis shopping diaries were used. Descriptive research seeks to present an accurate account of some phenomenon, the distribution of characteristics in some population, the patterns of relationships in some social

context, at a particular time, or the changes in those characteristics over time (Bulmer, 1986; cited Blaikie, 2006). In this study it is the relationship between food access and shopping behaviour which is being described. Through interviews, previous studies have shown a “siege mentality” or “hording” being present in areas where food provision is poor (Clark et al, 1995). Shopping diaries (Appendix 9) were used to identify other coping mechanisms which may be used such as frequent shopping occasions or using multiple stores.

Sociologists used personal documents to construct pictures of social reality from the actors' perspective (Plummer, 1983 cited Curti, 1993). Diaries are used as research instruments to collect detailed information about behaviour, events and other aspects of individuals' daily lives (Bava, 2008; Curti, 1993; Sullivan and Savitt, 1997). In this way dairies are used to document shopping trips and associated motivations for the trip over a seven day time period. This provides a picture of routines and behaviour which individuals may not have fully considered the reasoning behind or would find difficult to recall accurately in an interview situation. Used in combination with interview data they provide a rich source of information on respondents' behaviour and experiences on a daily basis, allowing comparison between what participants said and what they did (Jackson et al, 2006; Marshall & Anderson, 2002).

In addition to the types of errors encountered in all survey methods, diaries are especially prone to errors arising from respondent conditioning, incomplete recording of information and under-reporting, inadequate recall, insufficient cooperation and sample selection bias (Curti, 1993). To reduce these types of error every effort was made to ensure the diary is comprehensive, easy to use and fully explained to the respondents.

3.9.4 Cupboard Surveys

The cupboard survey is based on the Healthy Eating Indicator Shopping Basket (HEISB) used in the national survey (Dawson et al, 2008) to assess availability and price of healthy food items in stores. This HEISB contains 35 ‘healthy’ food items from the across the five food groups and was replicated in this study to assess

availability in the home. Anderson et al (2007) provides a full explanation of the HEISB development including how data from national food surveys were used to select items 'commonly consumed and culturally acceptable' and nutrient profiling used to determine 'healthy' food items. Appendix 4 shows the list of 35 healthy food items used in the cupboard survey.

Use of the HEISB tool in the home provides continuity between the National Study (Dawson, 2008) and this study and a direct comparison of availability of healthy foods in store and availability in the home. The survey also provided an opportunity to discuss access and availability of the 'healthy' items and raised interesting discussions which may have been overlooked without the use of this tool.

As with all survey tools there are limitations and this survey can provide only a snapshot at one point in time. Some flexibility for this is built into the tool in recording whether items are in stock in the home at time of interview, out of stock or never bought allowing a broader picture to emerge. Respondent error in completing the survey was reduced as the cupboard survey was completed with the researcher at the end of the interview in order to ensure completion and accurate collection of information.

3.9.5 Food Frequency Questionnaires

Food Frequency Questionnaires (FFQ) were used in order to give a broad indication of participants' dietary habits. FFQ's are questionnaires in which the respondent is presented with a list of foods and is required to say how often each is eaten in broad terms such as x times per day/ per week/ per month, etc and also records the quantities eaten on each such occasion (Margetts et al, 1997).

Given the small sample size in this study FFQ's could not be used for total dietary assessment. They can, however, give an indication of an individuals' diet in relation to national averages adding depth and understanding to how food access relates to food choices and actual consumption. Although the sample is not representative of the population in the Western Isles it does capture the intakes of participants in this

study. It adds a further dimension to the project and allows comment on the overall nutritional status of the interviewees to be made.

An existing FFQ (Scottish Collaborative Group, 2005) (Appendix 10) was used in this study as this was more time and cost effective. Using this FFQ had several other benefits such as the data entry facility (developed to complement the FFQ), which was made available for use and the option for initial analysis to be carried out by external experts. These benefits were useful both in terms of time and ensuring continuity with previous studies using this FFQ, thus allowing results to be compared. Cade et al (2001) highlight some considerations when using an existing FFQ such as the original purpose of the questionnaire, target population, country of origin and when the questionnaire was designed. As the FFQ used was designed for use in the Scottish population in recent years, its use in this study can be assumed appropriate.

As with all survey tools this method has both its strengths and limitations. Again respondent errors in recording or accuracy in reporting can be a major limitation. However, full and clear instructions are provided as part of the questionnaire and these were explained at the end of each interview and researchers contact details provided should any questions arise. In a number of cases the researcher completed the FFQ at the time of the interview in order to increase response rate and reduce respondent error. It was not possible for the researcher to complete all questionnaires at time of interview due to lack of time.

3.10 Data Collection Procedures

A pilot of all the data collection methods was carried out in August 2006. The pilot allowed the researcher to assess the design and clarity of the research instruments as well as practical aspects such as the timing of interviews and handling the recording equipment. A small sample group (n= 10) of various household types (Single person, elderly couple, co-habiting couple, Single parent family, 2 parent family) was used for the pilot to allow the researcher to obtain a range of perspectives both in the

interview situation and understanding of the research instruments. This was invaluable in testing and developing the research methods and feedback resulted in some modifications. For example, one of the variables in the shopping diary was amended to aid analysis at a later date and topics arising in the interview, previously unrecognised, were included in the interview schedule.

3.10.1 Data Collection

Data collection for the main study took place over two phases, phase one in October 2006 and phase two in April 2007. The table below shows the number of participants completing each of the data collection methods.

Table 3.7 – Data collection methods and response

Method	Phase 1	Phase 2
Focus Group	n=5	--
Interview	n=30	n=26
Shopping Diary	n=21	n=19
Cupboard Survey	n=30	n=26
FFQ	n=25	n=19

One focus group was carried out during phase one consisting of 5 participants. A total of 56 interviews were conducted over the two periods, 30 during the first phase and 26 during the second. Cupboard surveys were completed at time of interview for all participants (n=56). 8 FFQ's were also completed by the researcher at time of interview and 47 left for participants to self complete, one participant declined to complete the FFQ (Due to limited time). All participants (n=56) were asked to complete a 7 day shopping diary with a stamped addressed envelop supplied to each participant for the return of completed shopping diaries and FFQ's to the researcher.

3.10.2 Consent

Participation in the study was voluntary and informed consent was obtained before commencing each stage of data collection (Appendix 5). Informed consent implies a responsibility to explain as fully as possible, and in terms meaningful to participants, what the research is about, who is undertaking and financing it, why it is being undertaken, and how it is to be promoted (ibid.: 3; cited Payne and Payne, 2004). It was explained that participants' details remain confidential at all times and results written up to ensure their anonymity.

3.10.3 Focus group

Before beginning the focus group and interviews participants were informed of the nature of the research, funding and the general purpose of the study as exploring their food shopping experiences (Appendix 5). This description was purposefully broad to limit preconceptions of what was being investigated as this may influence response. Permission to record the focus group/ interview was sought as well as explaining that participants were able to withdraw at any time, one participant withdrew permission to record the interview after the interview had commenced and the remainder of the interview was hand written by the researcher.

The focus group took place during phase one of data collection (October 2006) in the home of one of the group members. The group consisted of 5 participants (4 female and 1 male) who were all members of Uist Whole Food Co-op, an internet/ mail order food group. As the participants all knew each other no formal introductions or icebreaker activities were required and the researcher opened up discussion with broad 'grand tour questions' (Spradley, 1979 cited; Webb and Kevern, 2001). These focused on what participants liked and disliked about food shopping. While the direction of discussion was driven by the group a pre-prepared topic guide was available to the researcher in order to maintain focused discussion (Appendix 6).

As all members of the group were well acquainted the group offered a relatively safe environment in which to share their experiences (Barbour, 2005) and encouraged relatively uninhibited discussion. Tonkiss (2004 cited; Hopkins, 2007) states focus group participants should be unknown to each other however; Holbrook and Jackson (1996) state 'focus groups with people who already know each other and share a sense of social identity have different strengths and weaknesses from research with groups of comparative strangers'. As the aim of this group was to provide the researcher with good background knowledge of the area and topics which were important to those living in the study area the familiarity within the group and ease with which the discussion flowed only served to enhance the outcome of the group.

3.10.4 Interviews

Interviews took place in participants' homes providing an informal, relaxed atmosphere, allowing them to feel comfortable in their surroundings all of which are conducive to establishing rapport. The process of establishing rapport is an essential component of the interview. Essentially rapport involves trust and a respect for the interviewee and the information he or she shares. It is also the means of establishing a safe and comfortable environment for sharing the interviewee's personal experiences and attitudes as they actually occurred. (Dicicco-Bloom and Crabtree, 2006)

Dicicco-Bloom and Crabtree (2006) discuss the four stages of rapport in the context of the research interview as apprehension, exploration, co-operation and participation. Taking these stages of interview into consideration the interview schedule (Appendix 7) was drawn up to correspond with the development of the interviewer – interviewee relationship. During this first stage the goal is to get the interviewee talking therefore the first two questions were broad and non-threatening whilst reflecting the nature of the research. 'Tell me a bit about yourself...' and 'Can you describe your usual shopping routine if you have one or what it is you do?' Allowing the interviewee to talk about themselves and their shopping routine should get the interviewee used to talking freely and encourage them to be open and relaxed

hence facilitating a productive interview and pleasant experience for both the interviewee and interviewer.

The exploration phase is when the interviewee becomes engaged in an in-depth description. This process is accompanied by learning, listening, testing and a sense of bonding and sharing (Dicicco-Bloom and Crabtree, 2006). In order to show commonality and aid sharing of information the researcher also shared information where appropriate aiming to give the interviewee more scope to express freely their thoughts and opinions (Arksey and Knight, 1999). For example, the researcher shared shopping and cooking practices when questioned by interviewee. Through sharing of information the goal of finding out information and establishing trust is achieved by reducing the hierarchy between the interviewee and researcher. Recognising the act of interviewing as invasive, reflexivity on the part of the researcher is essential. In this process the researcher gives thought to his or her social role and that of the interviewee, acknowledging power differentials between them and integrating reciprocity into the creation of knowledge (Atkinson and Coffry, 2002).

The next phase, the co-operative phase, is characterised by a comfort level in which the participants are not afraid of offending one another and find satisfaction in the interview process (Dicicco-Bloom and Crabtree, 2006). The interview schedule allowed time for this process to take place and had questions which led towards more personal and probing questions. During this time sensitive questions were asked and clarification sought with topics such as household food budget, perceptions of healthy eating and their own diet approached.

Not all interviews reached the final stage of participation where the interviewee takes on the role of guiding and teaching the interviewer (Dicicco-Bloom and Crabtree, 2006). However, those which did produced interesting information where participants explored their food choice behaviour and decisions to a level which had previously been subconscious.

Between the first and second phase of data collection the interview schedule was refined. Changes focused on answering the aims of the study which had been addressed to a lesser extent in phase 1 namely factors and influences on food choice and perceived availability of healthy foods. During phase one discussion focused on availability of products and issues within the stores in terms of quality and availability of goods. These topics were pertinent to the area where participants were reliant on smaller stores with a limited range of goods. Participants in phase two potentially had access to a larger store with a greater choice of products therefore these participants could discuss more in terms of choices available and the choices they made. In order to reflect these differences in the two areas the researcher concentrated on these areas of the interview schedule when directing the interview.

3.10.5 Cupboard survey and FFQ

At the end of the interview, the cupboard survey was completed by the researcher for each of the participants. This often generated further discussion around availability and affordability of the items on the list and was also recorded. Where time allowed, or participants requested assistance, the FFQ was carried out at the end of the interview (n=8). A full explanation of the FFQ's and shopping diaries was given by the researcher allowing an opportunity for questions to be asked. Before ending the interview a short questionnaire gathering participants' demographic information was completed by the researcher and all participants were given contact details for the researcher in case further information or clarification was required.

3.11 Response Rate

In order to achieve maximum response rate and completion of all the survey tools a number of strategies were employed. Cupboard surveys were carried out at time of interview by the researcher with all participants giving full consent and providing a one hundred percent response from this method. Each of the interviewees were asked to complete a Food Frequency Questionnaire (FFQ), where time allowed or

participants requested assistance help was provided from the researcher at the end of the interview (n=8). Again, where time permitted a number of participants, such as those with mobility problems, received a follow up visit to collect the shopping diary (n=3). However, this was not possible for all as the diary was recorded over a seven day period and in many cases the researcher had left the area by the end of this time.

In order to increase response rate all participants were sent thank you letters with a reminder (Appendix 6) to complete and return FFQ's and diaries where required as this type of follow up contact has been shown to increase response by 68 % in a study aimed at finding methods to increase response rate to postal questionnaires (Edwards et al, 2003).

From phase 1 of data collection (n=30), 30 cupboard surveys, 25 Food Frequency Questionnaires (FFQ) and 21 Shopping Diaries were completed and returned.

Table 3.8 - Phase 1 - Response rate

n=30	Total Returned	Outstanding	Response Rate (%)
Food Frequency Questionnaire	25	5	83
Shopping Diary	21	9	70
Cupboard Survey	30	30	100

In phase 2 of data collection (n=26), 26 cupboard surveys, 19 food frequency questionnaires (FFQ) and 19 Shopping Diaries were completed and returned although not all participants returned both.

Table 3.9 - Phase 2 Response rate

n=26	Total Returned	Outstanding	Response Rate (%)
Food Frequency Questionnaire	19	7	73
Shopping Diary	19	7	73
Cupboard Survey	26	26	100

Gordon (2002) suggests a 60% response rate might be acceptable, although a 70% would be preferable in a survey of a general population that aims to describe knowledge or behaviours. On this basis the response rate for completing and returning FFQ's and shopping diaries is adequate. This response was perhaps aided by the contact with the researcher during interview as the familiarity and rapport built during interview may have increased the feeling of loyalty and compliance to complete. The one to one interaction during interview and the time taken with each participant allowed a good rapport to develop with participants and for the researcher to develop interest in each individual's personal experience of food shopping. In using the snowball method for recruitment participants were also involved in recruiting for the research further increasing their involvement and relative proximity to the study.

3.12 Analysis

3.12.1 Focus Group

In order to use the data gathered from the focus group to provide background information and aid the researcher in carrying out interviews a basic analysis was carried out during the first phase of data collection. The researcher listened to the digital recording adding to their knowledge of the area and local habits/ traditions

and making notes. This process was useful in providing the researcher with an opportunity to revisit the focus group discussion and concentrate fully on the dialogue without the distraction of managing the group. Findings from the focus group were used as a background from which to conduct interviews and topics such as local food networks and bartering were added to the interview schedule. As simply creating a picture of the local area and its food access situation was the purpose of the group no further analysis was carried out.

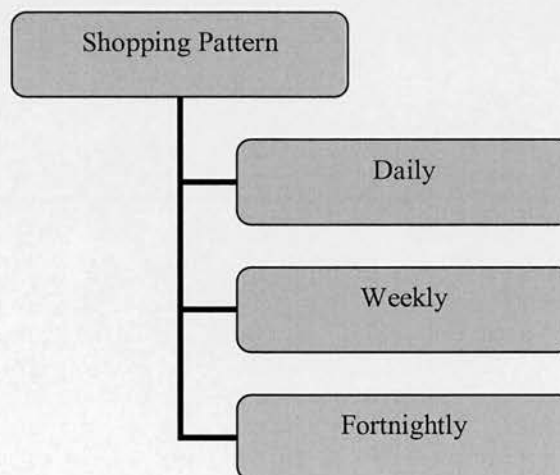
3.12.2 Interviews

Mason (1996 cited; Welsh, 2002) identifies three possible approaches to qualitative data analysis labelling them 'literal', 'interpretive' and 'reflexive'. The approach taken by this study was interpretive in order to make sense of research participants' accounts and attempt to interpret their meaning (Mason, 1996 cited; Welsh, 2002).

Thematic analysis was used to identify themes in the interviews, by using a coding scheme (Seale, 2004). Interviews were used as a resource to find out about the reality and experiences of participants in order to answer the research objectives. By immersion in data, repeated listening and reading of transcripts, initial codes were developed and expanded to create parent and child codes. The analytical process began during the data collection phase as data already gathered in interviews informed subsequent interviews and allowed the researcher to pursue emerging topics and themes in further depth. After each phase of data collection the researcher listened to interview recordings to gain a sense of participants' individual experiences and ensure the context of the interview was captured. During this process hand written notes were made. These notes were later re-read to identify broad categories and initial themes. In the next stage, all interview tapes were transcribed verbatim and imported into QSR NVivo 7. Qualitative data analysis software is designed to carry out administrative tasks of organising the data more efficiently and the decision to employ this software was based on its strengths as a sorting tool, ease of coding and speedy recovery of information from transcripts (Bazeley, 2007; Sorenson, 2008).

All sources in NVivo are coded as nodes (See footnotes 1 and 2) with transcripts stored as cases; these are nodes used to gather material about people or sites that have attributes such as gender or age. It also allowed attributes such as whether the participant lived in the Northern or Southern island group/ island they inhabited/ household composition and car ownership to be assigned to each transcript allowing search and analysis within these different attributes. Each transcript was then coded using a system of free¹ and tree² nodes. Tree nodes were primarily used to code the data as themes and links within the data emerged. For example: a tree node was developed for shopping patterns for which 'shopping patterns' was the "parent" node with 'daily', 'weekly', 'fortnightly', 'monthly' added as "child" nodes as patterns developed within the shopping patterns category. Free nodes were also used to code the data some of which were later merged into tree nodes where links emerged.

Figure 3.1 – Example of Tree Node with parent and child nodes



Some suggest using software such as NVivo could 'distance the researcher from the data' (Barry, 1998; Hinchliffe et al, 1997). However, others argue that it serves to

¹ Free nodes are 'stand alone' nodes which have no clear logical connection with other nodes

² Tree nodes are catalogued in a hierarchical structure moving from a more general category at the top (the parent node) to more specific categories (child nodes).

facilitate an accurate and transparent data analysis process whilst also providing a quick and simple way of who said what and when which in turn, provides a reliable, general picture of the data (Morison and Moir, 1998; Richards and Richards, 1994 cited; Welsh, 2002). The researcher constantly moved between the coded themes and the transcripts as a whole to ensure the context of the original interview was preserved.

3.12.3 Cupboard Surveys & Shopping Diaries

A similar process for analysis was carried out for both the cupboard surveys and the shopping diaries, with statistical analysis using SPSS 15. Demographic information was also collected for each of the participants and this was coded and data inputted into an excel spreadsheet.

A coding frame was developed for the cupboard survey prior to data collection using a similar scheme to that used in the National store survey. The scheme was modified slightly to allow for the home situation with the following categories assigned;

- In stock – In participants home at time of interview
- Out of stock – Not available in the home at time of interview
- Never buy – Never available in the home
- Home grown/ produced/ gift – Products which have been home produced, caught or given as a gift from family/ friend/ neighbour etc

This last category was added after piloting the survey as this highlighted the possibility of 'home produced' foods. This category allows food coming into the home by means other than a store to be recognised and recorded.

A coding frame for the shopping diaries was constructed only after all data was collected. This was to provide flexibility in the research tool and ensure participants were not forced to select categories which may not be appropriate. For example, only the name and type of shop was requested in the shopping diary rather than

define shop types to allow for some of the less conventional retail outlets. Coding in this way was preferable to using closed coding categories however; researcher discretion was required on choosing the final coding frame.

After coding, the data for the cupboard survey and the shopping diaries were inputted into separate excel spreadsheets, both containing demographic data. Once complete these excel files were imported into SPSS for statistical analysis.

3.12.4 Food Frequency Questionnaires

On return of the FFQ's they were checked to ensure all of the sections were complete. Only one participant had omitted a double page and this was followed up by telephone call to complete the data. The MS access file developed for data entry of this FFQ was provided by Aberdeen University. Standard operating procedures for entering FFQ information along with the codes for fats and other foods were also supplied for use to ensure data was being correctly recorded. Data was entered and the completed file returned to Aberdeen for initial analysis. The initial analysis carried out on the data allowed further analysis to be carried out after transferring into SPSS.

3.13 SAMPLE DEMOGRAPHICS

3.13.1 Gender

With 87% of participants in this sample female there is a gender bias. However, as the main food shopper in the household was interviewed and 69.6% of households contained an adult male, this suggests that females are responsible for the main food shopping within this sample.

3.13.2 Number in Household

Table 3.10 - Number of people in sample households

Number in Household	Frequency	Percentage
1	13	23
2	21	38
3	10	18
4	9	16
5	3	5

On comparison with the Scottish Household Survey (SHS) 2005/2006 the numbers within the households are similar to those shown in table 4.1. The SHS found 32% of households were single occupancy, 36% had 2 people, 15% with three people, 12% were 4 people households and 5% inhabited by five or more people.

3.13.3 Age group

Table 3.11 - Age group of sample

Age Group (Years)	16-25	26-35	35-49	50-65	66+
No. in Sample (%)	2	16	32	27	23

3.13.4 Household Composition

Table 3.12 - Household composition of the sample

Household Composition	No. in Sample (%)
1 adult	25
2 adults	32
3 or more adults	7
Single parent	7
2 or more adults + 1 or more children	29

There were several different household configurations within the sample. Households with 2 or three adults include flatmates, adult siblings living together, adult children living at home with parents as well as both young and empty nest couples.

The Scottish Household Survey 2005/2006 found almost a third of households (32 per cent) contain only one adult, this figure was lower in this sample at 25%. One third (33 per cent) of those in the SHS sample contain two adults, comparable to the 32.1% in this sample. Households with children represent about a quarter (26 per cent) of households which is again similar to this sample (28.6%).

3.13.5 Living Arrangements

Comparing the marital status of the participants in this study with those in the General Register Office for Scotland census in 2001, statistics for inhabited islands shows both samples to be similar. The census shows 52.3% of islanders to be married/ remarried and within this study 55.4% are married. Census data shows 33.9% of islanders to be living alone and although the number in table 3.13 shows this figure to be lower (23.2%) in this study table 4.4 below shows that 33.9% of participants are single (Adult siblings living together and shared accommodation account for the 10% who are single but living in a household greater than 1). The percentage of lone parent households in the Western Isles was 3.2% in 2001 and 1.8% in this study.

Table 3.13 - Marital Status of sample

Marital Status	No. in sample (%)
Single	14
Single with Children	2
Married	23
Married with Children	30
Co-habiting	2
Co-habiting with children	4
Widowed/ divorced/ separated	20
Widowed/ divorced/ separated with children	5

3.13.6 Employment Status

Comparisons can again be drawn with the 2001 census where 62.9% of islanders were in employment and 64.3% in this group. Table 4.5 below shows 23.2% of participants were retired at time of interview and the 2001 census shows that 21.4% of islanders were of retirement age.

Table 3.14 – Employment status of Sample

Employment Status	No. in Sample (%)
Full time (30 + hours)	30
Part time (8-29 hours)	32
Part time (Under 8 hours)	2
Retired	23
Full time higher education	4
Not in paid employment (Not seeking work)	9

3.13.7 Education

Table 3.15 – Educational attainment of sample

	Number in Sample (%)
Secondary School (16 years)	41
Secondary School (18 years)	4
Further Education (HND etc)	30
Undergraduate Degree	20
Postgraduate Degree	5

Comparing again table 4.6 above with the census data, 20.3% of islanders had undergraduate or postgraduate degrees in 2001 compared to 25% of participants in this study. Of those participating in this study 44.1% held standard grade/ equivalent or no qualifications compared to 59.1% in the census.

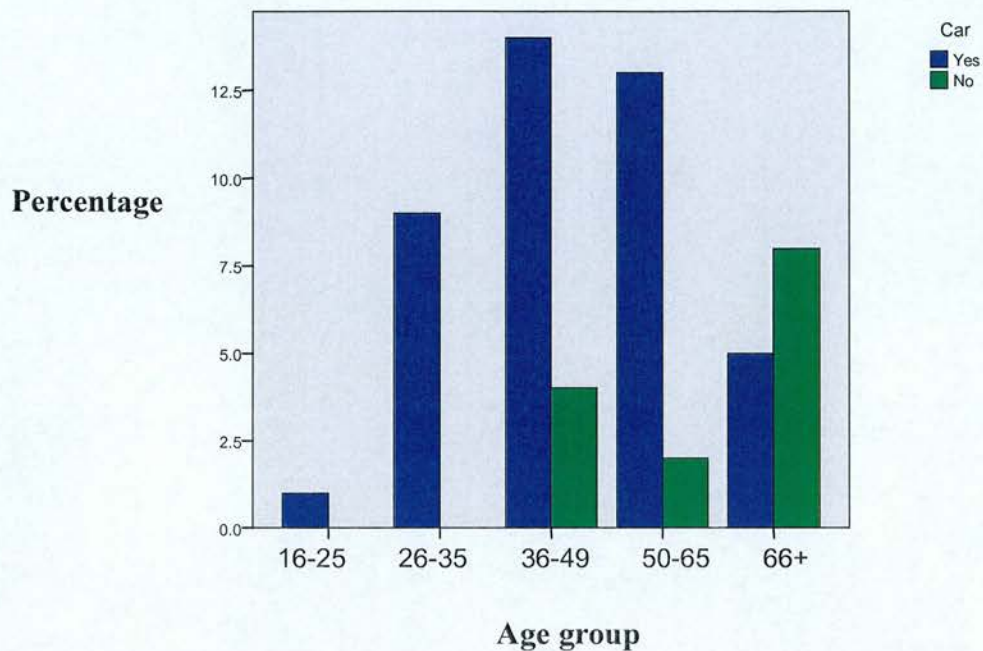
3.13.8 Islander/ Incomer

The sample is reasonably evenly split between those in the sample who are indigenous to the islands or are incomers. Both islanders and incomers are quite equally represented in the sample group - 46% incomers/ 54% islanders. Participants are also quite evenly split between those living in the Northern Western Isles (46%) and those living in the South (54%).

3.13.9 Access to Car

Census data shows that although only two thirds of Scottish households have a car three quarters of island households do which is the same proportion as the households in this study (75%). Those over 66 years old are least likely to have access to a car for shopping as shown below.

Figure 3.2 – Age group of those with access to a car



3.14 Conclusions

This chapter has outlined and provided rationale for the research objectives, approach and methods taken. The choice of study area and the sampling methods used to recruit participants have been justified. The mixed methods used for data collection allow the topic to be examined from different perspectives and clarify and support findings.

The subsequent three chapters present findings from interviews, while chapters 7, 8 and 9 provide results from the supplementary surveys.

CHAPTER FOUR

FOOD RETAIL PROVISION AND ACCESS TO STORES

4.1 Introduction

This chapter reports on participants' perceptions of food retail provision on the islands and how they access and use different types of stores. It states participants' views of the retail mix in their area and considers how the type of store, size of store and stock in store impacts on how they view the food retail provision in their area.

4.2 Perceptions of Retail Provision

Perceptions of retail provision throughout Eilean Siar varied across the islands depending on the types of stores available to the individual and specific circumstances and requirements of their household. Some participants had a positive perception of retail provision while others found the provision substandard with complaints about the choice, quality and variability of food availability.

There were a total of 60 stores throughout the western isles (See map 3.2, page 63) but these were not all accessible by road to the whole population due to the geography of the islands. There was one large general store³, four medium general stores⁴, thirty-nine small general stores⁵ and sixteen specialist stores⁶. The main shopping centre in the western isles is located in Stornoway on Lewis where there is one large, one medium general store and a variety of small general food stores and some specialist stores. In the Northern Island group i.e. Lewis and Harris, the only large multiple and medium sized general food stores are both located in Stornoway,

³ Food store of greater than 15,000 sq ft selling area

⁴ Food store between 3,000- 15,000 sq ft selling area

⁵ Food store with less than 3,000 sq ft selling area

⁶ Stores selling narrower range of food products, but in some depth

which is quite a distance away for some households. Those accessing these larger stores have a positive perception of retail provision

“Stornoway store is good: vegetables, fruit, meat, bread, fish, in between they’re pretty good, there’s two stores so they’re pretty good yeh” (Male, 65+, Islander, North)

The national survey (Dawson et al, 2008) found 51% of the population in Eilean Siar had to travel in excess of 10km and 22% in excess of 25km to reach a medium or large size store. In this study, 64.3% of ‘main’ shopping occasions in the North required a travelling distance in excess of 20.1 miles, with distances of up to 50 miles reported. Although the distances some participants have to travel to access these stores can be considerable, the choice available in store appears to compensate for the travelling distance required. The Social Exclusion Unit (2003) has defined easy access as being within 500 meters of households however, this is not a realistic distance in a rural or remote area so sparsely populated (9 persons per square km), neither is it the expectation of the rural and remote consumer, with participants accepting that this is part of living in a remote area.

For those living outwith Stornoway, small general stores, a few specialist stores, mobile grocery and fish vans provide other food retail alternatives. These stores, located within the small communities, are valued for the provision they provide, their contribution to the local economy in terms of employment and the friendly and knowledgeable service they provide.

“I just think its better stuff. It’s local and it’s just a more ethical way to shop. I’m always quite suspicious of how supermarkets process things... Say for instance, see the butcher here, he’s actually my next-door-neighbour and just knowing the bit of, just hanging meat and how long they hang it for and when you go to the supermarket and meats oozing with blood and it’s just nonsense, you know what I mean?... I just think it’s a bit of a con and these people know far more about the product than the supermarkets do. I just tend to... I’ve got the impression that the supermarkets are almost submitting to the will of an uneducated public if you know what I mean, in that they’re just trying to make it look as nice as they can and allegedly especially... You know what I mean, like

oozing with blood and stuff like that? ...I mean in reality, it shouldn't be like that. It shouldn't be like that at all." (Male, aged 26-35, Islander, North)

The perceptions consumers have of small independent stores varied depending on store, household circumstances and frequency of use. How participants used this type of store and to what extent they were relied upon to supply household food supplies affected participants' expectations of these stores and therefore their perception of them. In the North these small general stores were only used for 'top up' shopping, rather than for main shopping trips. Used in this context

"The local shops are quite good. The one just up the road here is great compared with what it used to be like years ago, but it's quite expensive. It's really expensive actually, you know...Yes, it's quite expensive for, you know if you were to be doing your shopping there. And they don't have everything obviously". (Female, aged 26-35, Islander, North)

This individual would not expect to do a 'main' shop in this local store in part due to the range of produce, but also because it is seen as expensive. It is used for a 'top up' shop and satisfactory for this use with provision having improved since this participant left the island for university 13 years ago. This store provides a service for the local community in providing the produce necessary to sustain participants between their main shopping trips to Stornoway.

For many of the participants living in the North islands, travelling to Stornoway for all or the main food shopping was accepted as the "norm" and this expectation contributed to shaping participants perceptions of retail provision. Those who rely on the smaller local stores for their food shopping, such as the less mobile elderly and those living in areas of the Southern Western Isles (where smaller stores are all that is available to them), there is a higher expectation of what should be available in the smaller stores. They expect the small stores to have a wide enough variety of produce in stock to be able to undertake a 'main shop' and to purchase a range of foods from which to make meals and snacks. For those limited to using these small

stores for all their food shopping their perception of food retailing is often poorer as they have a more limited range of products than those with access to larger stores.

For some of these participants the lack of variety, choice and poor quality produce available in some of these small stores is disappointing and restricts the food choices available to them as explained by this elderly incomer with limited mobility, for which provision in her local shop has deteriorated in recent years.

“I used to spend about £20 every week between dog food and bread and milk but... there’s absolutely nothing in it, no vegetables they don’t even keep potatoes and they don’t deliver so life is very difficult...” (Female, aged 66+, Incomer, North)

The store survey carried out for the National survey found this store to have only 10 out of a possible 35 items available at time of survey. These ten items were all dry, tinned or frozen goods with no fresh fruit or vegetables available. Other than this small store the nearest alternative is a garage forecourt with a selection of food products, which is located 20 miles away (59 mins drive time, AA Route finder). For this elderly participant who can no longer drive due to mobility problems the garage would not be an option for shopping unless someone gave her a lift. In other small stores where more produce is available some participants find them prohibitively expensive:

“It’s really expensive the local shop, like I said. Everybody seems to think so, anyway. I obviously want to support them but I’d probably just buy sort of whatever I need desperately. I buy maybe last minute things and papers and that kind of thing, you know, rather than...” (Female, aged 26-35, Islander, North)

About a quarter of food shopping trips required journey times in excess of thirty minutes (See chapter 7). This journey could be difficult or impossible for some due to work commitments. Travelling to the shops can take up large parts of the day and limit time spent on other activities. Some participants suggested they would like to do more of their shopping at their local store to support local business and reduce the economic and time costs associated with food shopping. However, the limited

variety and availability of good quality produce hampered this choice where it might have been an option in the past

"I actually used the shop more when it was better, you know. They used to have nice meat and potatoes, fresh veg and everything, yes. Yes I did use the shop more, but now I don't..." (Female, aged 50-65, Incomer, North)

The owner of this store had become ill and as a consequence the store had suffered with less produce stocked. Those living in the community served by this store used the store previously when provision in the store was better and wished to do so again, mostly due to personal ease of access and in order to support local business.

Choosing a local business which benefits the community was the preferred choice for some. Those using community co-ops generally regarded them as 'great' not only because of the sense of giving back to the community but ultimately because these stores stocked a wide range of good quality produce at reasonable prices.

While smaller stores were perceived as more expensive some individuals were willing to pay for the convenience of shopping locally and supporting a local business. Those on a more limited budget are less likely to consider 'supporting a local business' than those with more flexibility in their food shopping budget.

"The two shops here are excellent really. One point, they are slightly pricey of course because they are local grocers and they're all trying to add their whatever percentage on...I don't mind paying it at all for the convenience, you know. I don't even look at the price to be quite frank." (Male, aged 36-49, Islander, North)

In the South of the islands there are three medium sized general food stores but some communities do not have access to these due to the physical distance to the store and the associated time and expense of travelling to them by car, bus or in some instances a ferry journey. These individuals and communities are reliant on small general food stores for their 'main' shopping and place greater demand on these stores in terms of providing a wide range and variety of good quality produce.

Therefore, they have higher expectations than those using this store type for top up shopping only and the perceived lack of choice and expense of shopping in these stores was more of a concern.

“Everything is that bit dearer here as well you see that when you go away [to the mainland] as well you see the difference in price... Oh everything from milk bread, we pay over a pound for bread where you can get one in the supermarket for forty odd pence I go to Asda when I’m out with my sister and you can get a loaf for twenty odd pence you know we’re, for that size one pound eighteen” (Female, aged 36-49, Islander, South)

Buying basic items which cost a little extra on a regular basis can become considerable over time when there is no other option but to purchase them from these small stores. In the retail survey (Dawson et al, 2008) Eilean Siar was found to be the second most expensive sentinel in which to purchase the HEISB items (Median basket price £49.18), with the rural deprived area the most expensive (£52.75). The cheapest sentinel in which to purchase the HEISB was the small town affluent with a median basket price of £42.30 (Dawson et al, 2008).

4.2.1 Retail Mix

In general, consumers throughout Eilean Siar were satisfied with the number of stores available to them, although satisfaction within the stores sometimes varied, in terms of product selection, product quality and service. Most consumers accept they have to travel in order to access a store which provides adequate choices, especially those who chose to live in the more remote areas, although one elderly islander moved from her family croft in the country into the town (Balnavanich) *“Cos it’s near the shops and near everything”* (Female, aged 66+, Islander, South) such as other amenities e.g. the doctor.

Living in such a remote island location most participants expected to travel longer distances, than those on the mainland, to access food stores. Expectations of the choice available in store were also less than would be expected from the larger stores on the mainland. These compromises in terms of store accessibility and choice in

store were regarded, for many, as a trade off for living in an area with beautiful scenery and safe communities. Others living in one of the major towns (Lochmaddy), with only one small independent store, believe they should have better food provision closer to home as this is the main harbour town in North Uist.

“there’s no other food shop so I think a lot of people would be really pleased if there was an extension of the co-op in Lochmaddy and that would shake things up a bit but because he has the monopoly he probably feels quite justified in having the shop the way it is, it’s expensive and it’s a small shop so they can’t actually have that much in it” (Female, aged 50-65, Incomer, South)

Although these participants can access stores with a good range of produce they have to travel long distances to do so and would like a ‘better’ shop closer to home, as the only store in this town stocked a limited range of produce (Store stocked between 40-60% of HEISB items, Dawson et al, 2008). The expectation is not for a large supermarket, just a store where they can purchase a good range of quality produce at reasonable prices. In many areas throughout the Western Isles, participants feel the lack of competition means the stores continue to keep prices high and have inconsistent levels of stock. Participants felt an increase in the choice of stores would encourage existing stores to be more competitive, reduce prices and increase product selection.

These rural and remote consumers accept they are not going to have the same retail provision as on the mainland nor, for the most part, do they want it. Many participants mentioned their dislike of the large multiples on the mainland for a variety of reasons; ethical choice, the lack of atmosphere and the obscene amount of food products available in these types of stores, which they found off putting.

“It’s against my whole kind of, my ideals but I just do it. I mean what I find absolutely awful about them I mean I went recently with my sister to the massive Tescos in Stockport and it’s got everything in there I mean you could basically spend your whole day there its got the café, it’s got this, you’ve got you’re washing machines, you’ve got your fridges I don’t know just I always think it’s bonkers really em ... this massive choice of things that are the same

basically I just don't see the point in that at all em and that's why it's irritating" (Female, aged 36-49, Incomer, South)

Although many participants held similar views, others enjoyed the choice and value provided in these large mainland stores and took pleasure in shopping there when they had the opportunity. Even some of those who disliked the ethos and atmosphere of these supermarkets admitted using them when on the mainland. None of the participants travelled to the mainland specifically to carry out food shopping however, many of those travelling for work or holidays used the opportunity to purchase some items. For some, these were annual or more regular trips and large amounts of food were purchased. For those purchasing large amounts this often included non-food items such as washing powder and toilet rolls. Those who felt the choice and quality of produce available on the islands was good chose to purchase only enough basic items to get them through the first day home or purchased special items unavailable on the islands e.g. specific spices/ chocolates/ Marks and Spencer's ready meals.

However it was expected that stores on the Western Isles should provide the best service, value, quality and variety of produce possible, within the limitations of the size of store and stocking capacity. When consumers perceive that a store, no matter how big or small, is achieving its full potential then they appear to have a positive perception of retail provision, however, when consumers feel a store is not delivering the best possible service then they have a negative perception of retail provision. This perception does vary slightly between consumers when their use of the store varies and therefore their expectations differ.

4.3 Perceptions of Different Store Types

Participants classified stores in terms of ownership i.e. co-op, symbol group or name of independent retailer and in some instances store size but more commonly referred to stores only by name. Therefore store classifications used in this section are taken from the national retail study carried out by Dawson et al, 2008. Food stores were divided into the following types:

- Stores selling a wide range of food products – general food stores;
- Stores selling a narrower range of food products, but in some depth – specialist food stores;
- And food secondary stores – a store in which food is present but as a secondary range e.g. in confectioners and newsagents

The general food store type includes supermarkets, grocers, hypermarkets, convenience stores, freezer centres and discounters. The specialist type includes butchers, bakers, fishmongers, greengrocers, market stalls and delicatessens. Non-food stores include newsagents, confectioners and off-licences.

The general food stores were further divided, using sales area figures, into the following sub-types:

- Small general food store with less than 3,000 sq ft selling area;
- Medium general food store between 3,000-15,000 sq ft selling area;
- And large general food store of greater than 15,000 sq ft selling area

The types of stores available in the western isles were limited with no hypermarkets, freezer stores or discounters. In most areas the only store type available was a general food store and participant's primarily classified stores by ownership. In this section classification in terms of ownership has been included to indicate chain (C), independent (I) or community owned stores. This classification was included as it appeared to be an important factor in terms of the provision in store and the relationship participants had with the store.

4.3.1 Large General Food Store (LGS)

As discussed previously, only consumers in the North have access to a large general food store and perceptions of this store were generally favourable. The large floor space and capacity to stock a wide range of products as well as providing other

services such as facilities for utility bill payment and mobile phone top up added to the favourable perception consumers had of this store.

“One stop shop really and its starting to get you buy anything in there TV’s, phones you can buy anything virtually there kind of. I think they are starting to sell a lot of things that are not food to get you in for instance the post office here, you can’t pay your TV licence or your phone bill or your phone cards they’ve gave that up so you have to go to [MGS] or the [LGS] to use the swipe card there so I have a kind of electric meter with a card and you can top that up there [LSG] as well so that kind of attracts you in you know get all that in one go” (Male, aged 36-49, Incomer, North)

There were no reports of a lack of choice for those using this large store with a wide variety of produce available. The large store and opportunity to take time and browse the aisles is something ‘time rich’ consumers liked about the large general store, browsing the shelves looking at things they do not necessarily need which seemed to add pleasure to the shopping experience. It is this opportunity to browse in store that allows consumers the time to look at new products, read packaging and enjoy the food shopping experience. This space in store allows the shopping experience to be more relaxed with time taken to explore new food choice options. This consumer explains how she likes to take time when carrying out the households food shopping and buy different products.

“Usually if I’m food shopping I like to browse yes, I like going on my own and just browsing and just having a look around at the stuff I don’t normally buy. That’s the kind of thing I like to do if I’ve got time. If I go and I’m focussed then I buy the same stuff. It’s probably why I don’t have grapes and you know... I’m just buying my usual things... In a hurry, you know. But I tend to buy more different things when I’ve got time, you know, to kind of have a look about.” (Female, 26-35, Islander, North)

4.3.2 Medium General Food Stores (MGS)

There are 4 medium general food stores in Eilean Siar, one in the North and three in the South; one of which is an independent. In the South these vary in size and are

the largest available store type in this area. Participant perceptions of these stores vary between stores and each individual with factors such as moral choices, customer preferences and products required considered. These medium size stores reportedly provide a good service with provision in store of good quality and value in comparison to the other store types available. However, there are a few exceptions and some negative comments for this store type.

For some consumers in the North the medium size store is preferable to the large store as they consider it to be cheaper and the quality and selection of fruit and vegetables to be better.

"I find the quality is much, much better and they last, it lasts a bit longer. I tend to find that when I was getting it from the [LGSC] I was paying more for it for starters, ... You are definitely paying more for your fruit and veg in the [LGSC] than you are in [MGSC], so money does have something to do with it, and I also found that sometimes, quite often, the [LGSC] own would sweat a lot quicker, you know, it would go off a lot quicker. [MGSC] tends to stay that bit fresher a bit longer. You don't get as much variety in [MGSC] as you do in the [LGSC], but that's because the [LGSC] have got the space whereas [MGSC] don't have the space" (Female, aged 36-49, Islander, North)

This perception is shared by a number of participants but others also make similar comments in reference to the larger store, suggesting a personal preference for store choice decisions. Participants' perceptions are shaped by past experiences, with attention paid to the issues that are most important to their circumstances whether that be expense, variety or the ambience in store. The space in store and ambience is important for some and makes the shopping experience more pleasurable and the reason given for this participant choosing the larger store

"it's a strange thing I never ever liked shopping in [MGSC] because it's quite a claustrophobic shop" (Female, aged 36-49, Islander, South)

Of the three medium size stores in the South one is an independent and the other two are members of the same chain. Some participants are keen to support the store

owned by a local, providing it supplies them with the produce they require. Comments suggest this store stocks good quality produce and a wide variety of products that may not be available in the other stores locally. This participant uses both stores and finds the independent stocks a different range of produce, which she likes.

“Maybe more things like tahini, brown lentils, maybe more whole food types, different types of olives eh what else can you get in [independent]... Greek yoghurt well you can get Greek style yoghurt in the [chain] but you can’t get Greek yoghurt em what else do I go to [independent] for well just sometimes maybe aubergines or you know maybe slightly different vegetables” (Female, aged 50-65, Incomer, South)

Two of these three medium size stores were within a reasonable distance of each other (approx. 5.5miles, 15 minutes drive time AA route finder) and participants reported using these in different ways due to the stock in store and for some the independent status of one. These two stores both had a range of basic supplies however; the independent store had a range of other products and more exotic fruit and vegetables. Some used this store for all of their food shopping while others only shopped here to purchase these more unusual items, which were not available in other stores in the South of the islands, in this way these shops complimented each other. Participants in the South travelled long distances, often passing other stores on route, to reach this store with its wider variety of produce. However, the limited space within this store made the shopping experience uncomfortable for some

“I always go to the [chain] but I go down there when I can’t get to the [chain] I prefer the [chain], it’s got a bigger range, well bigger range... it’s easier to walk round it can get quite congested that shop down there’s [independent] very full you know but the [chain] prity good with what it gets in” (Female, aged 66+, Incomer, South)

“I don’t like the check outs and your queuing up in two long lines you know down the shop and then people can’t get to the shelves and it’s just – I don’t like the ambiance or the atmosphere in the shop or what ever you call it” (Female, aged 50-65, Incomer, South)

Perceptions of the two medium size chain stores are very different, primarily due to differences in store management and stock control. One of these stores is generally perceived as good however, the other is viewed as poor. For those who have this as their local store, some were frustrated by the poor store management and poor customer service.

“Not the best place for shopping...No, not at all, not at all”

Interviewer – What’s not good about it?

“Just that there’s hardly ever anything there, you go in and they haven’t got this and they haven’t got that. They’ve got a lot of fresh chicken, fine if you want chicken every day but other things ... many’s a day you can’t get bread, if there’s something on they never have extra bread. A few weeks ago I was a whole week without getting bread because in the [MGSC] they didn’t have any.” (Female, aged 16-25, Islander, South)

This participant is restricted to this medium general food store (chain) closest to her home as a result of her work patterns, as she has multiple jobs with varying shifts. The nature of her shift work leaves only short periods of time between jobs where it would not be possible to travel the 40 mile round trip to access an alternative medium sized store, and on finishing work the store would be closed. Several of those living in this area, particularly those using this as their main store, reported problems with the provision in store. However, others who do not work or travel out with their immediate area to work can access stores in other areas. One participant, who works on another island, uses several stores out with her local area to increase her food choices as she finds the provision in the medium general store (chain) closest to her is poor, even in comparison to the previous MGSC that was replaced by this bigger building.

Another participant, who also works in the store, talks about the store regularly running out of basic items on a daily (bread) and weekly basis (potatoes).

“Well you’d have to sort of plan it well in advance because they’ve got gingers [biscuits] there and some days they haven’t and their favourite in the winter is running out of potatoes and carrots ... Why

isn't it ordered properly yeh I know ...That is the problem because we had a visiting manager over last week and when he went away, because usually on a Saturday there's no bread left, but when he went back on Saturday I was still putting out bread so whether he's changed their order or what either that or people are going somewhere else for their bread" (Female, aged 50-65, Incomer, South)

Those who use this store regularly expressed uncertainty in the provision available in this store even at times when they would expect the store to be fully stocked. There were a number of factors contributing to this poor provision including undelivered items and poor stocking of shelves. In a number of cases food was left through the back in storage, even when the shelves were empty.

"You have to go in when the lorries have just been you know delivering. Like tonight I went to get milk but they only had the wee tiny bottles so obviously it hasn't come in yet or if it has it's not been put out. Should have been in, should have been in at four o'clock"

Interviewer – But it's not on the shelves yet?

"No, no cos I went in a few weeks ago and they said oh its here the milks here but there's nobody to put it on the shelves and I said well I want milk just now, go and get me a big 2 litre of milk and they did...And if you didn't ask they wouldn't bother telling you. And they're for ever running out of things you know – oh it was ordered but it didn't come in, try again on Wednesday its just so annoying, so annoying" (Female, aged 36-49, Islander, South)

As a result of this inconsistent stocking and availability in store several of the participants, for whom this was the closest general store, chose to shop in another area.

"I'm able to eh there's a shop in Eriskay and that is since the causeway became that's made a real difference you know because instead of having to go 6 miles up to [MGSC] I can whiz across the causeway and pick you know things up and actually that shop is a very good shop and it's developed you know I think they thought when the causeway opened oh help all of Eriskay will go to [MGSC] but [MGSC] been a wee bit disappointing and so in fact people go to Eriskay to shop, some you know" (Female, aged 50-65, Incomer, South)

This consumer chose the much smaller community co-op over this MGSC as it provided a more consistent supply of the products she required. This option would not have been available in the past before the causeway way built to join the islands. The introduction of causeways to the islands have increased store choice options for consumers and removed the time constraints for those reliant on ferry links between islands. Participants report causeways have also improved the delivery of produce to some of the stores and may be a contributory factor in improved food provision in stores such as the community co-op on Eriskay. This increase in choice of stores has perhaps increased competition for some of the small stores and this may have contributed to the reported improvement in provision within the store.

4.3.3 Small Chain Stores (SCS)

There are two small chain stores in the South, one on Barra and the other in Sollas on North Uist. Although these stores have a similar floor size and are members of the same retail group the customers using these two stores differ in the choice of stores available to them. For those living in Sollas, this may be the store they use for the majority of their shopping but they can access other larger stores by car or by bus. For those in Barra this is the largest store available to them without leaving the island by boat, which would be both time consuming and expensive. This limited choice of store means there is a greater dependence on this store and therefore a need for a wide range of good quality produce in stock.

Participants recognised the limitations of the small floor space available in these stores and the associated difficulties in storing stock and providing a wide range of goods. The limited space available for stock storage and display caused some problems and was one issue raised as limiting the food choices available to participants. However, while most accepted this limitation, participants were critical of how the store was being managed

"And the [SCS]... I don't want to slag it off but I have regularly gone to, the manager, with a basket of out of date meat that's been two or three days out of date"

Interviewer – and it's still on the shelf?

"...and its still on the shelf and it hasn't been reduced. They just look at me when I go round and say – what date is it?" (Female, aged 26-35, Islander, South)

The delivery route to these two stores also differs and some consumers suspect this has an influence on the quality of the produce the shops receive. All stores in the Southern isle except Barra receive their food supplies by the same route, via Stornoway. Barra stores receive food supplies from a ferry direct from the mainland but produce supplied by this route is reportedly of poor quality.

"Bananas are always poor quality here, they're always old and bruised I find and if they look nice they won't have that nice fresh fruit flavour that bananas hopefully should have. I suppose that's transport there are problems with transport so food has got to be a bit more expensive and a bit older if it's coming all the way from the mainland I suppose. Em I don't like having to buy bags of apples when one or two of the apples in the bag are obviously bad and I've had that happen, especially in the smaller shops not so much in the [SCS] or you know you buy a pack of tomatoes and one of the tomatoes is all mouldy round the back I mean these things happen a lot I think the [SCS] try to sell things off cheap in the afternoon if they've reached their sell by date but they seem to go mouldy and bad long before their sell by date sometimes and fresh chickens have been a problem in the past in the [SCS] even when they are well within their sell by date when you take off all the wrapping you just want to through it away and I"

Interviewer – Smell?

"Yeh and I presume that's maybe a transport thing. It must be quite a difficult job I'm glad I don't have to do it" (Female, aged 50-65, Incomer, South)

This poor quality produce is from the main food store on the island with the only other food stores available here being small independents. The national survey found that one of these small independents stocked between 40-60% of the HEISB and the other less than 20% of the HEISB (Dawson et al, 2008). As the largest and

main food retailer on the island this poor quality 'fresh' produce will affect food choice decisions and the amount of fresh fruit and vegetables being consumed by those reliant on this store. In this area the main problems arising concerned fresh produce such as meat, poultry and fruit and vegetables. Problems around accessing these products are more difficult to overcome than sourcing dried goods due to their fresh nature and the difficulties transporting and storing these goods. These items also provide the basis of meals and are required in order to achieve a healthy balanced diet.

Many participants acknowledged the difficulty of managing such a store and an appreciation for the achievements of the management in these stores is evident. These participants recognise the limitations of the store but also appreciate the effort being made in order to store a range of produce, which participants think is in demand and had previously been unavailable locally.

"He's very good the manager at the co-op now having had years of various people try it and not particularly succeed he seems to be doing fairly well." (Female, aged 50-65, Incomer, South)

"The [SCS] here is brilliant, the [SCS] is really good the one thing that they've started is they're last week is that they're now getting stuff from Highland Wholefoods⁷ which I thought was excellent and they've already been sold out and I went down to the [MGSC] and they don't have them I thought they would so that says a lot for the manager at the [SCS] she's really good and if you ask for something they'll try and get it for you but obviously if they don't sell very much of it they'll not be able to keep it going on the shelves" (Female, aged 50-65, Incomer, South)

The small floor space and narrow aisles in these store types are viewed as a hindrance to some while others embrace the situation and utilise the opportunity to socialise with their fellow shoppers. This social aspect of shopping is important to many, particularly some of the older community and those living alone who use the food shopping trip in order to 'get out the house' and to meet and chat to people. It is common to meet the same people each week in the store, at the fish van or on the

⁷ Highland Wholefoods – a workers cooperative, based in Inverness. Supply the Highlands and north-east of Scotland with organic, vegetarian, GM-free and fair trade products.

shopping bus and of particular importance through the winter months when people spend more time in the home, due to the bad weather. The importance placed on the social aspect of shopping and perceptions of the busy store with narrow aisles are perhaps influenced by the time available for shopping where the elderly have more time and enjoy the company the shopping experience provides

"We talk all the time, we have to go single file around the whole thing because if somebody's in front of you, you can't go by em you have to just wait its hysterical, you should go... yes it's very social"
(Female, aged 66+, Incomer, South)

While the busy working mum does not have this luxury and would prefer a more spacious shop, as these small stores can be very busy at times with long queues.

"... it's worse when the ferries don't come in its just the queue in the shop because they are not very adequately equipped in the [SCS] em the way its laid out doesn't help ...when its busy the way it is you can be queuing out the door when the ferries come in but generally you are queuing down the first isle - there's a one way system in the [SCS] but just lately I've not been going at the same time I used to and its not so bad - first thing in the mornings busy... for long enough I was leaving the fridge empty I just couldn't be bothered going shopping, I have done that quite a bit lately but I have started going back shopping because he [partner] was complaining there was never anything in. I just got to that stage where I couldn't be bothered doing it anymore, going shopping I just hated it, my main hate here is shopping and when I go to the mainland you can't get me out of the supermarket ..." (Female, aged 26-35, Islander, South)

While some enjoy a busy shopping trip the lack of floor space and time consuming nature of shopping in this small store has caused this participant to stop shopping at busy shopping times when the range of produce available is largest. By shopping at quieter times there may be more of a reliance on dried, tinned and frozen goods.

Those who have the option to shop in a larger store in another area, are less dependant on these small stores to stock everything they need and therefore expect less from the stores in terms of the variety of produce stocked. For this reason these people have a more positive perception of this store type however, where these small

stores are the only food store available there is a greater expectation on the range and quality of produce available in store. When these expectations are not met negative shopping experiences are reported and a poor perception of this store type is portrayed.

“As I say it is getting a lot better than it used to be, it used to be a lot worse than it is now but it’s still horrendous (laughs)” (Female, aged 26-35, Islander, South)

“It’s functional yes, it’s not a pleasure, it’s a pleasure going to the market, like the producers market you know cos there’s home baking and homemade jam and homemade chutney very occasionally there’s eggs and there’s fresh, there’s fish and meat...I love getting a bargain that’s what I miss about the mainland you know going to thrift shops and markets and things and sort of being able to make a genuine choice. It’s a bit like your social life here if there’s something happening everyone goes – you just have to make the best of what’s around” (Female, 50-65, Incomer, South)

These comments illustrate how the difficulties and constraints of shopping for food in such a small store trying to fulfil the needs of a whole island, with a diverse population of 1,078 (General Register Office for Scotland, 2003), can impact on the perception of food retail provision and how this might affect food choice decisions. Although there are products available in these stores it is this idea of not having a ‘genuine choice’ which participants find most difficult to deal with. In these small stores the limited range of produce available often means products are selected rather than being the product of “choice”.

4.3.4 Small Independent Stores (SIS)

Small independent stores were often regarded as an essential part of the community. In particular the additional services many provide such as post office facilities and petrol pumps were acknowledged as making life a lot easier especially in the more remote areas. Participants were concerned that some of these small remote post offices may be closed in the future and fear the food stores attached to these may also be forced to close and reduce the choice of stores available with many being the only food store available locally (within 30 minutes drive time).

Consumers generally supported small independent stores and many of the participants in this study felt it was important to use them in order to ensure they stayed open and could continue to provide a service to the community. Although this store type was not used for the main household shopping most used them for topping up supplies

"I try to use the local shop and post office for the odd thing because if you don't use it you'll lose it and it's good to have so I tend to go there" (Female, aged 50-65, Islander, South)

"But we support the local shops during the week. We feel we've got to, and they can't compete with supermarkets. It's as simple as that. But when you're buying bulk like us, it would cost us a fortune to be buying everything from the local shops, but at the same time we support them during the week." (Female, aged 66+, Islander, North)

In many of the more remote areas of the Western Isles these small independent shops are located closer to certain communities than the larger store types. For this reason they are valuable although provision in these stores varied. Some of these small independents provided other services such as selling petrol or postal services, and these were regarded as essential services, but participants still wanted them to provide a good range of food products. Several of these independent stores were well stocked and provided a good service however, others were viewed as having poor provision, some having deteriorated in recent years as a result of change in ownership, loss of interest or the lack of competition in the area.

"we don't have any other supermarkets so there's no competition so they've more or less got a captive audience, you know even between the wee shops here you know there's no..." (Female, aged 26-35, Islander, South)

These types of stores were mainly used for top up shopping although some consumers expressed an interest in increasing their usage of them and others have suggested ways to increase their custom in store. One participant supported her local independent store by purchasing a variety of products, such as meat and milk, on a

weekly basis. One area where the stores' provision is poor is in fresh fruit and vegetables and this consumer has suggested a way of increasing sales and ensuring her custom.

Interviewer – Like you say, the fruit and veg doesn't look that great but it is that vicious circle that if people aren't going in to buy it then it won't look great cos it's sitting

“That's right, so maybe if... well we suggested that maybe if we gave an order but he didn't seem to... auch I think the guy that's there with the shop just now with the shop he just doesn't want to be there so he's probably not making the effort which in turn is putting people off going in so it's on a ... but I think it's got potential the shop you know” (Female, aged 36-49, Incomer, South)

This individual feels there is a lack of interest on the part of the storeowner and that the provision in store is suffering as a result but some of the other small independent stores are praised for their efforts to serve their local communities.

In areas where there are only small stores, either chain or independent, people often use several stores in combination in order to purchase the range of goods they require with each store filling some gap in provision. This participant finds one of the independent stores stocks a range of different fruits and vegetables to the other two stores on the island. Several people in this area talked of each store stocking different products and this is perhaps one way in which the stores have adapted in order to survive with each providing a niche market.

“The small shops, the independent shops on the island are the best I find they're better value although well not better value's not right, they will get something out of the ordinary you know they'll get avocado pears and they'll get extra grapes and Chinese pears and figs and all these different kind of things they work really hard and they'll bring in venison sausages and locally produced sausages and black pudding and things like that so that's what I tend to buy I try to go for their back pudding and if I'm buying sausages if we're low in the freezer then I'll buy sausages from them rather than go into the [SCS]” (Female, aged 36-49, Incomer, South)

“well you've got to really, use the other shops, you can't get everything you want in the you know like in the [SCS], the meat if

you have to buy meat it's nicer down the street in the butchers (This is not a conventional butchers just how the store is named historically) or the [SIS] they have much nicer meat than the [SCS]." (Female, aged 36-49, Islander, South)

Most consumers believed these stores to be more expensive compared to the other store types available either locally, on other islands or on the mainland. For some this expense meant they chose to shop elsewhere, while others acknowledged the extra costs incurred by the smaller independent stores and balanced this against the convenience of shopping locally and supporting these small businesses.

Living in these small communities there is a tendency for people to know one another and the shop owners. For some participants this familiarity and often-friendly atmosphere in store adds to the sense of community and is part of the shopping experience and island life. However, for some others who use these independent stores more infrequently there is a feeling of guilt when they do. In some instances this deters consumers from shopping in these stores, and in the area discussed above where the three food retailers on the island each add something to the product lines available, this self imposed restriction on store choice may reduce the variety of produce available to them

"the chap that owns it sits there in the corner quite often in a chair you know and you feel I should be in there more often really I feel there's a bit of kind of pressure"

Interviewer – And that makes you less likely to go in?

"Well it does really, he's very nice but I'm aware that I am a bit of a stranger when I do go in." (Female, aged 50-65, Incomer, South)

As with all the store types it seems there are both advantages and disadvantages of using this type of store both in the range and quality of produce available and the customer service in store, with perceptions varying between stores and individuals.

4.3.5 Community Co-ops

There are two community owned shops in Eilean Siar, one in the North in Uig on Lewis, the other in the South on Eriskay. All those using these stores regularly in this study regarded them as providing a great service with good provision. Consumer perceptions regarding the range and quality of the produce provided in these stores is favourable. This consumer compares provision in the community co-op to that in her local independent small store.

“A community shop like they have in Uig. I think it’s fabulous. I know I can go down there in, what, 40 minutes or something and shop down there and get anything – lemons, limes, aubergines, you know, really unusual things. Here you’re getting the very basics – tea, sugar, milk, lots of tins, lots of pot noodles.” (Female, aged 50-65, Incomer, North)

There is a real sense of community in these stores and something, which many participants wanted to be part of and contribute to by supporting the store and a local employer. The service in store is reported as friendly and helpful, with the store manager sourcing items when requested by consumers. It is this personal service and effort on the part of the management, which adds to the positive perception of this type of store as this retired couple explain

“The wee shop is very, very good, it’s...” (Wife)

“It’s an excellent shop for a small shop.” (Husband)

“Yes. It’s lovely and clean and they’ll get things for you. Like, we like free range chicken and so she’ll get it for me, you know. So anything that you ask or request, she’ll get it. So she’s very good at...” (Wife) (Female/ Male, aged 66+, Incomers, South)

This couple accept prices may be slightly more expensive than in the medium general store nearby. However, they chose to carry out the majority of their shopping at this store as they prefer to support this community shop as they feel it is part of living in a small community such as this. They are mindful of the prices in

store and if large savings can be made in the chain store they will purchase these; otherwise they continue to support the community co-op.

"I think the [MGSC] can negotiate for better deals and they don't have facility. But mostly it's only pennies. If it was a big difference I won't buy it. So, say, the [MGSC] have got special offers on Persil or something like that, you know. A pound difference or... It's just, you know, you might as well go to the [MGSC] for it. But mainly they're getting in things like cheaper Persil and that now aren't they?" (Wife)

"Yes. There's not much difference. And it's much more convenient to shop here. You know, we do feel that because we do live in a small community we have to support it. It's not that we're counting pennies each week like people were years ago. We don't live in that age anymore, do we? No. So tuppence, or threepence, or twenty pence, you don't worry." (Husband) (Female/ Male, aged 66+, Incomers, South)

For these participants cheaper non-food items do not determine their store choice and they continue to carry out the bulk of their shopping in the community coop. These non-food items will be purchased on a more infrequent trip to the larger chain store, if there are savings to be made, but the location of the full shop will not alter.

Although some participants were unwilling to shop in this store type, because of the added expense and the extra choice available in a larger store, many of the participants in this study supported the concept of this store type. In two separate areas where provision in the local independent store was regarded as poor there was support for these stores becoming community owned shops. If the other members of these communities are as supportive as those in this study there may be an opportunity for more of these types of enterprises. Given the positive perception of the current community owned shops this change in ownership could potentially improve food retail provision in these areas.

4.4 Summary

Participants' perceptions' of stores are based on what factors are important to them and how they use the store. Perceptions are sometimes based on comparison to other stores either on other islands or on the mainland. Many of the consumers in this study recognised the difficulties store owners/ managers face in providing food provision in this geographically challenging area and are sympathetic to factors such as shipping deliveries, limited floor space and storage. However, poor perceptions of retail provision arise when consumers feel they are receiving a sub standard service such as poor stock management leading to unavailability of products and poor customer service.

ACCESSING STORES

4.6 Introduction

This section examines how participants access food stores and how they view their access to the stores. Factors that affect access both to the store and within the store are also discussed.

Food access does not just relate to physical access to food but also to economic access. Physical access refers to the range and quality of food available in shops that people can actually reach, whether by foot, public transport, or, if they have access to one, by car. Economic access is about having enough money to buy appropriate food. This depends on how much money a household has, how much it can allocate to food as opposed to other, mandatory, expenditure such as utilities' costs, rent and debt repayment, and on the price of food.

In considering rural consumers' perceptions of retail access, issues around transport, parking, time constraints and store layout arose. For many of those interviewed access to a store with adequate food provision did not pose a significant problem. However, there were difficulties for some and most participants mentioned some

constraints or difficulties with accessing adequate retail provision, many of which were overcome without great difficulty.

4.7 Transport

Consumers without access to a car are often identified as in the 'at risk' members of the community in terms of food access (Furey et al, 2001). Within this study a car was used for the majority of the 'main' food shopping (91.4%), with 75% of participants owning a car. Census data (General Register Office for Scotland census in 2001, 2003) shows that although only two thirds of Scottish households have a car three quarters of island households do, the same proportion as the households in this study, suggesting that a car is more of a necessity in order to live in these more remote communities. For some the long distances to the food store or difficulty carrying a large shop were given as reasons of shopping by car as well as convenience. Shopping diary results show, 25.7% of participants did not have a car but 17.1% of these received a 'lift' from family/ friend or neighbour to carry out the 'main' food shopping. None of the participants walked to carry out the 'main' food shopping with 5.7% having their main shop carried out by a home help and 2.9% travelling to the store on the shopping bus.

4.7.1 Public Transport

For those without access to a car the shopping routine was determined by when public transport was available or could be accessed. For those using public transport the time chosen to shop was determined by the bus timetable, which as a remote area with a small population could be infrequent

"Em for Stornoway the bus service we've got a bus every two hours, two hourly except on Saturday eh you've got one in the morning, one in the afternoon and then one at tea time which is not very good, it's not a good service on a Saturday and of course on Sunday we don't have any thing at all" (Female, aged 36-49, Islander, North)

"I can't drive and that's the time the buses go so I have no other choice, I would rather go in the morning yes and get it over and done with but I've no other choice...by the time we get up there it's after two ...so sometimes they are short of veg" (Female, aged 36-49, Islander, South).

Restrictions on when participants can get to the store indirectly affect what is available to them in store. A combination of delivery times and limited space in store cause people to shop when deliveries arrive in order to have the best choice of produce, therefore food is available on a first come first served basis. For those reliant on public transport, where bus schedules mean they arrive later in the day, this may mean the choice of produce is compromised, in particular fresh produce. (Traveline Scotland, online)

Differences in bus service routes and times between during the week and weekend also influence shopping times and routines. As the quote below shows, this participant carries out most of her shopping on a Saturday but the limited bus service operating in this area means the bus does not stop as close to her home as it does during the week (Ness-Stornoway). As she needs to carry the shopping further (approx ½ a mile or 800 meters) on a Saturday she supplements this by topping up during the week to ease the amount being carried at one time.

"I can do yeh but that's not so easy because I can't get the bus at the door because it's a limited service on a Saturday so I have to walk out to the end of the road you know where you came in ... it's not that far but when your carrying bags back it's quite a distance – your arms get longer it's just the weight. That's why when I'm in college I might go into town and I might do the butcher one day or I might take a wee trip into [MGSC] or [chemist] or whatever, do it that way" (Female, aged 36-49, Islander, North)

This participant does not work full time and has some time available during the week to do some food shopping. However, the time available to her for shopping is limited as she must get the bus home leaving insufficient time in which to carry out a 'main' shop. At least this participant has some time available between leaving

college and catching the bus whereas it might poses more of a problem for others working full time, without access to a car, as the shopping diaries show participants in this study who work full time prefer to carryout their 'main' shop on a Saturday, with 42.9% of those in full time employment doing so (See Chapter 7).

Another problem associated with travelling to store by bus is the time taken to travel to and from store, due to the distances from stores, which some report as problematic when purchasing certain items such as frozen goods.

"Frozen vegetables eh ... not much of them the reason, I would buy more, but it's getting them from town back here, time you know if they start defrosting you can't put them back into your freezer can you so again if I've got the car and I know I'm going straight in and straight back yes I can buy some but it's mostly fresh fruit and veg I have, I hardly ever, I hardly ever have frozen"

Interviewer – And is that mostly because of the transport problem?

"Eh well I would have to, yes because I would buy more if I had transport... It's transport cos I mean your frozen veg it's just as good for you as your fresh actually sometimes they're better than your fresh depending on the quality" (Female, aged 36-49, Islander, North)

For others using public transport the time available in store is constrained by the bus times. For this single male, who shops a few times a week on the way home from work, the time available in store for shopping is very limited. This means he has no time to browse in store and only purchases a few items at one time and those not stocked at the store near his home.

"Even when I'm shopping in the [LGSC], and as I said my time's limited if I'm there, I know automatically not to bother getting like some of the stuff I've already mentioned. Onions and peppers and all that"

Interviewer - Because you've got your bus to get?

"Yes, and I know I can get it here [shops close to home]. I'm looking for the stuff that I can't get." (Male, aged 36-49, Islander, North)

This consumer goes on to talk about what influences his choice of store, realising that the time available in store is dictating how he shops, as he doesn't drive and is constrained by the bus schedule

"I think if I drove, I probably would do a lot more shopping in the [LGSC], probably because it's cheaper. But I don't drive, so that basically is what dictates probably how I shop...It's the time I've got before the bus comes really. You know, you will not believe how much, sometimes, I've cut it close. I've almost missed the bus a few times; you know when you get stuck down a queue. And the clock's ticking. I'm thinking 'here's 20 past, bus is at half past' and then of course the odd, somebody, they don't have the price in the queue and the button gets pressed and the supervisor has to come over. That's happened a few times and I'm thinking 'I'm going to miss this bus'." (Male, aged 36-49, Islander, North)

This participant manages with this shopping routine as he does not have a family requiring a large amount of food at one time, nor is he too constrained by budget and uses the smaller, more expensive, stores closer to home to purchase the other items he needs allowing him to focus his shopping in the large store on items unavailable in his local store. For those on a tight budget or with a large family who must purchase a larger number of items this limited time in store may be more of a problem.

Conversely, carrying out the household shopping using public transport can be very time consuming, taking up large portions of the day. This consumer describes her usual Saturday shopping trip, which from door to door takes about five and a half hours.

"Eh 35 minutes to town, wee bitty longer on Saturday because it seems to go up around about is it Benside so you can add another ten minutes on so 45 minutes"

Interviewer – And how long would you spend in the supermarket on a Saturday?

"In the supermarket, auch I spend ages in the supermarket because what happens is I take the bus over I get the ten o'clock so I'm over

for eleven, now I can get the bus back oh it's usually about I think it's quarter to 3 so I can spend a good hour and a half up and down"

Interviewer – So you've got about four hours?

"Well it's not quite four hours because by the time you get back so by the time I go over I usually probably go for a cup of tea or that, take my time, back home..." (Female, aged 36-49, Islander, North)

This trip is necessary for this individual in living in this community in order to access the choice of food required by her household, as the range of produce is larger and the supermarkets and butchers in town are cheaper than the small stores closer to her home. Although the distances involved are larger she comments that this is still easier than travelling the 3 miles to her local small and specialist stores.

"Well I don't have a car now so it's not very easy for me to get, it's actually easier for me to go to Stornoway for my shopping than it is to go the three miles down the road because I don't have transport." (Female, aged 36-49, Islander, North)

In another area a different system operates where the bus has a circular route, stopping twice and waiting while passengers shop before carrying on the journey. On this route other services are accessed such as the bank and the fish van. For this 'car less' participant the service is useful in allowing her time to carryout all her shopping and banking without taking up a large part of the day, taking two and a half hours she describes the routine.

"Well I go Tuesday mornings I get the bus here at ... o'clock and it takes me over to the co-op in Sollas and I get back at half past one"

Interviewer – What time do you get the bus at?

"11 o'clock in the morning, but we go into Lochmaddy, we go out to Lochmaddy if you want to go out to the bank or anything like that you can get to the bank at the same time so it's kind of handy in that way since I can't drive, none of us can drive so ...It goes just round the village picking up passengers that want to go to the [SCS] and then it comes back"

Interviewer – And does it wait while you go to the [SCS] and then go to Lochmaddy or is it another bus?

“Uh huh it waits, it waits at the [SCS] you get about three quarters of an hour to shop which is ample or I’d be spending more money, money that I haven’t got so...”

Interviewer - What about fish do you ever buy fish?

“Yes... I ... get fish on a Tuesday fresh fish, when you go, when I go to Lochmaddy on a Tuesday there’s a van selling fresh fish out there on a Tuesday as well as the [SCS]”

Interviewer – That’s quite a handy wee run

“Aye it is you can get everything in the one go” (Female, aged 50-65, Islander, South)

A larger store is available to this participant but requires a longer journey and carrying heavy shopping bags is too difficult.

“Sometimes I go but it’s too much of a hassle to be carrying bags so usually that’s my main area, Sollas for shopping”

Interviewer – How often would you go down to Benbecula?

“Aw I hardly, I hardly, I only go up there if I have business to do up there if I’ve got a few other things to do at Benbecula... I can’t be going up wasting my time because you leave here at ten o’clock in the morning and you don’t get back until half past two. So it’s a long day so you really have to have a lot of other things to do as well as shopping... eh but if I do go to the shops it I’ll be [SIS] or [MGS] but its always the light stuff I buy not the heavy, I don’t buy tins and I don’t buy... cos there’s nothing I dislike more than trying to carry bags on buses and things so ... eh ...so I always maybe get the bread and if I need fresh bread and all of that I’ll get it up there and I’ll get it in the co-op as well but if I’m running short of bread and if I’m up there I’ll take bread and rolls and things” (Female, aged 50-65, Islander, South)

Although larger stores with more variety and choice can be accessed by this participant difficulties carrying large or heavy shopping as well as the time required to do so limit this alternative. Food shopping requires more than simply having transport networks available as the large distances between stores mean large periods

of time must be allocated for the shopping activity. Physical difficulties of carrying shopping bags can restrict the quantity and type of products purchased which can influence the store choices of participants and therefore the produce available to them. Stores may be selected for ease of access rather than being the preferred store choice.

For those living in some of the more remote areas, out with the small villages with a store, accessing 'top-up' items is more problematic and time consuming than for those living in towns and villages with access to shops.

"I mean you canae go into a corner store here you've got to rely on the car or the bus an the buses are few and far between you couldnae get a bus up and think I'll run round and get the bus back doon in ten minutes because it would be an hour or maybe mair" (Female, aged 50-65, Incomer, South)

This consumer praises the bus service available for punctuality and the service it provides but with a limited customer base the service is infrequent. Therefore, living in remote areas consumers concede they must be more organised, do without, make do with alternatives or face longer trip times.

4.7.2 Travel Costs Associated with Food Shopping

Car ownership undoubtedly makes accessing food stores easier however some participants reported that the fuel costs involved in travelling the large distances to stores influenced the frequency of shopping trips and accessing larger stores further from home. In order to keep fuel costs to a minimum many participants reported tying food-shopping trips to other activities such as work or social commitments.

"it would be part of another trip not specifically to shop because its 25 miles round trip not quite it's probably about 20 miles there and 20 miles back and that's a lot of petrol and petrol is extremely expensive here"

Interviewer – Do you think if petrol wasn't as expensive you might go more often?

"Well yes cos you would for the fun of it because its something different to do but it's not terrible not to go but you just go with what you can" (Female, aged 66+, Incomer, South)

By limiting trips to reduce this cost the flexibility in store choice is restricted with participants shopping closer to home in order to reduce travel costs. By limiting store choice in this way participants are potentially limiting the range of produce available to them and may face higher prices in some of the smaller stores. In some instances the additional costs of shopping in a small local store are weighed against travel costs and availability concerns in order to make store choice decisions. As this consumer does to ensure she is always able to purchase fresh milk

"Some times in the summer it will just go and he [independent retailer] won't have it so I've just always placed an order with him and then even if it goes even if I don't get in there til Saturday he keeps it for me, so its just to know that at least I've got milk but I think that the shop here is a bit dearer but at least your not spending it on the fuel, he's pretty good you know some of his prices" (Female, 66+, Islander, South)

Perceptions of retail provision can vary between islands with some consumers travelling by ferry to increase their store choice options. Again the additional travel costs associated with this type of trip must be weighed against possible savings to be made and the increase in choice of produce. For this participant with a young family the food-shopping budget was restricted but in the past had chosen to travel to other islands to carry out the households food shopping.

Interviewer - You mentioned [MGSC] do you go across there?

"We had been going quite regular but lately I haven't so... it's not so easy with young kids"

Interviewer – Were you going across there to shop?

"Yeh, just to, specifically to shop."

Interviewer – And did you take the car across?

“Yeh, I was buying books of six for the ferry it works out slightly cheaper works out about ten pounds a journey for the car, £60 for a book of six for the car and then you’ve got your own ticket on top..... I know you’re adding that onto the price of your shop but when you go over and you have so much more choice... of everything...and it’s nicer so we were doing that for a while”
(Female, aged 26-35, Islander, South)

For most of those living on Barra, the expense of travelling by ferry meant this was not an economically feasible option however; many participants took the opportunity to carry out food shopping on the other islands if they were over for another reason.

“but if I go to Uist at all I’ll shop over there get quite a bit in that cash and carry you know – were you in there?... em [MGS]”

Interviewer – How often would you go there?

“Oh I don’t go often, no maybe once, twice a year that’s it”

Interviewer – Is that just when you are over for something else?

“Yes, yes either a hospital appointment or over just for a day out that was about it - wouldn’t go over... it would be too expensive to go over. But it is expensive here the food” (Female, aged 50-65, Islander, South)

Where store choice options can be available from a physical access point they may not always be practical or economically viable. Again this limits the store choices and food choices available. For some, the knowledge of these larger stores, with a greater choice and variety of products, available on neighbouring islands negatively influences their perceptions of local retail provision, perceptions of access and choice in store, as comparisons are drawn.

4.8 Difficulties getting to Store

In the southern isles a local voluntary organisation, ‘Tagsa Uist’ runs a ‘shopping bus’ which provides transport for those who are unable to use or access public transport, due to a physical disability, medical illness or a mental health problem. This shopping bus service took participants to the store on a weekly basis. One

elderly participant who used the shopping bus reported another instance where restriction on choice of shopping time affected the food choice available. Although she reports this as a very good service, the time she is taken to the store often means arriving before the store receives its delivery and as such there are often items unavailable in store.

“we’ve got the bus that comes to take us on a Wednesday for shopping the disabled bus on a Wednesday and one week we go to the [MGSC] and although the [MGSC] is very good the bus just seems to miss the [delivery] coming in, we seem to miss the bread and the milk which is a great shame. It’s not so bad for me because my daughter comes and takes me out once a week and we go out for lunch and any more shopping I want to do we do but for the likes of one or two others that haven’t got a car and haven’t got a husband or anything it’s a bit awkward it means they have to get a taxi to the shop so it, the bus, could do with being a bit later to catch the goods coming in at the [MGSC] there’s usually no bread and no milk on a Wednesday when we go and they’re just stocking up on things when we go. And then the next week we go to [MGSI] and he seems to get his a bit sooner than the [MGSC] so” (Female, aged 66+, Incomer, South)

Although this participant has family support to supplement this service and help with her food shopping this may not be the case for others using the bus and reliant on this service for their full shopping. If this is the case then there are implications for the products available to those using the shopping bus on this day, as this participant reports basic perishable items, such as bread and milk, being unavailable.

In other areas of Eilean Siar this type of service is not available. For those with mobility problems in this area a home help carries out the weekly food shopping. One participant was a home help and discussed how food shopping was within their remit and 5.7% of participants received their main food shopping from a home help. Although this was an invaluable service and one which was appreciated, this elderly vegetarian participant would prefer a service which allowed her to visit the store in person.

"They were going to have a bus here to take people shopping but that fell through"

Interviewer – For the elderly going shopping?

"Yes for going shopping that's what we could do with something like that cos"

Interviewer – Would you rather go to the shops yourself?

"Yes because it's very difficult to order a cabbage or a cauliflower cos you can't see that they look like so most of the things I order are like onions, potatoes, carrots, you can't go far wrong with carrots you know but em it is very difficult"

Interviewer – And when you go to the supermarket yourself would you buy a larger variety of vegetables?

"Yes, yes I watch what I ask her [home help] to get, you see three years ago my daughter worked in town and she was very good but she's retired now she's a pensioner as well so you can guess my age now and eh she's not over in town all the time either, [neighbour] very good if she's going over she'll take me eh you can phone, you can't phone in an order to [MGSC] or the [LGSC] but you can phone they come out here on certain days I believe but you've got to go and pick what you want so that's not very good, if I could phone the shop and say what I want and of course they would be picking it but I would be the only one"

Interviewer – So a service that took you to the shop...

"Would be very useful ...Oh yes, it would improve my life, you see when I moved here we had Bird's Eye the frozen people what do you call them they used to come out with a van, there was a milk man came out, there was a grocery van came out but they've all gone so the island has no travelling van, there's a butchers van which is of no use to me" (Female, aged 66+, Incomer, North)

This particular participant lived in quite a remote area and felt very dependent on others for her shopping. Accessing stores is very difficult for her and as a vegetarian she feels more restricted and limited in the variety and choice of produce available to her as she likes to see and feel the vegetables before purchasing them. She lives in the North and would welcome a similar service to that operating in the South. Although the shopping bus has a few problems with regards to timing of shopping trips the service is praised as 'excellent' providing an invaluable service and allows

individuals to maintain some independence and an opportunity for socialising with others.

4.9 Social Networks

Many participants in this study who did not have a car received a lift for food shopping from family, friends or neighbours (68.4%). These social networks vary in regularity from an odd occasion, to help out during illness, to family members taking elderly parents three times per week. This participant does not drive and relies on her husband to drive to the shops. However, at the time of interview he was in hospital and unable to drive for some time. Although there are shops within walking distance of her home this is difficult due to her own health problems

"I find it hard to walk at all so I'll have to have a go at walking down to the shop, I think my husband will have a go at walking down to the shop for his paper every day and I'll have to make the effort but when you know its going to be quite painful and you can walk down but when you get shopping you've got to walk back with it haven't you and that's not, also you've got to think of what your going to buy because you've got to carry it so that doesn't work but like [neighbour] across the road she's a really good neighbour and she's taking me down the shops today and then my daughter whenever she's finished work on a Friday she'll take me to the [MGSC] and so I will get there because I've got a lot of friends but it must be difficult for a lot of people up here"
(Female, aged 66+, Incomer, South)

Mobility problems are commonly associated with the elderly and an issue which may be of particular relevance to those in Eilean Siar. There has been a long-term population decline of about 40% between 1901 and 2001. However, after a long period of decline there has been a recent up turn in population. Since 2003 there has been a 1% increase in total population in Eilean Siar. However, the biggest increase was among those aged 55 to 59 which grew by 10% between 2003 and 2005. Over the same time the number of school aged children under 5 continued to decline (The Outer Hebrides Migration Study, 2007). Consequently, the area has an ageing population profile with the highest proportion of elderly people in Scotland. The

Outer Hebrides Migration Study (2007) predicts a reduction in the working aged population and an increase in the average population age by 2019 suggesting increasing numbers of the communities in Eilean Siar will require support in the future.

The increasingly elderly population may face problems in the future accessing food shopping as they will lack family support on the islands. However, this elderly native islander has a good family support network with several family members contributing to enable their mother to maintain her habitual shopping routine.

“My sons or my daughter they all come down and take me, every Tuesday and every Thursday and every Saturday”

“...I know what I need and I get it and if I’m short then my children get it, I phone them and they’ll get it for me that’s the way I work it”

Interviewer – You’re quite lucky having all your children near

“Yes they’re all around me and that’s what I do if I need them I can always phone them and they can do it” (Female, aged 66+, Islander, South)

These social networks are undoubtedly invaluable as without them the individuals involved would find it very difficult to get to a food store due to physical difficulties or the extra expense, such as a taxi to travel to and from the store.

Some participants are completely reliant on the support of family for their food shopping as they are no longer able to carry out their own shopping. This elderly participants’ son does all her shopping as she stopped going with him to the store after this incident

“The vans come and if there’s anything in between he gets it because I’ve stopped going to the supermarket because I was there one day and I’m coming down with what I thought was a box of biscuits but what was it but a jigsaw puzzle and he said ‘what do you think you’re going to do with that?’ I’m going to eat

them I said, two packets of jigsaw puzzles so I don't go anywhere anymore..." (Female, aged 66+, Islander, North)

For this participant the support of her family is essential to ensure she has access to a wide range of food products and enables her to continue living independently. Her son does all the food shopping and also shops for other elderly members of the community

"There's lots of old people here and people who don't have car's that depend on the vans – there's lots of people here that don't have cars but the neighbours help them out"

[Son]- "yes we need the vans... oh yes if you're going to town you might phone three houses who have widows and have no means of getting to town so you bring that back as well but it's still a very communal type system although things are changing even in my own time" (Female, aged 66+ [son, aged 50-65], Islanders, North)

This illustrates how family and community support enables immobile consumers to access the food supplies they require. This participant lived in a very remote community and was some distance from the main stores in Stornoway. Without the support of other members of the community and the mobile grocery van, which visit on a weekly basis, these elderly consumers without access to personal transport would have great difficulties accessing the foods they required on a regular basis.

4.10 Time Constraints

4.10.1 'Shopping Days'

Participants report variable availability of produce in stores at certain times of the day and week, when deliveries arrive in store. This variability is due to delivery schedules and limited storage in store particularly in some of the smaller stores in the South.

It is generally accepted that food shopping must be carried out on the day deliveries arrive or early the next day, otherwise choice will be limited. If a delivery arrived in store one afternoon, participants tended to shop later that day or the next morning in order to obtain best choice available.

“So ... it’s not very easy but you get into the routine here that you don’t really think anything of it, it’s just the way of life here it’s just normal for us” (Female, aged 36-49, Islander, South)

This shopping routine is fitted within every day routines and frequent shopping trips are habitual. These are termed ‘shopping days’ and are particularly evident in the shopping patterns of those in the South. In the South the day for carrying out the ‘main’ shop is quite evenly spread throughout the week with the most frequent day being Wednesday (25%) but also on Thursday (20%), Friday (20%), Saturday (20%) and Monday (15%), see chapter 7. This pattern of shopping is confirmed by these three participants, all of whom use a different store on different islands illustrating this is not isolated to one area, with delivery schedules changing to correspond with summer and winter ferry sailings.

“usually well if you don’t go here the day its... usually three days a week you get bread and milk like in the summer its Tuesday, Thursday and Saturday and then in the winter it changes over to Monday, Wednesday and Friday you don’t go that morning you’ve had it, you don’t get bread and milk” (Female, aged 36-49, Islander, South)

“Well – the fresh food comes in Monday, Wednesday and Friday evenings. So afternoons, late afternoons, into our little shop. So Tuesday, Thursday and Saturday are mainly our shopping days here.” (Male, aged 66+, Incomer, South)

“Well we’re very fortunate because the [SCS] is just below where we live which is the main place we shop and we can see the lorries coming in three times a week so the routine, the normal routine is the lorries get here about 11.30 Monday, Wednesday and Friday so about 1.30/ 2 o’clock everything fresh is on the shelves so I like to try and shop about that time on those days for fresh things and then just once in a while for other things but not often, not daily” (Female, 66+, Incomer, South)

Shopping on these 'shopping days' is generally adhered to in order to ensure maximum choice of the produce in store access to the freshest produce of which there can be a limited supply. Fresh produce is one area where participants reported problems with products such as fruit and vegetables having a short shelf life after arriving in store. Participants therefore bought these items with a short shelf life when they arrived in store and consumed within the home soon after purchase.

4.10.2 Work Patterns

Where participants are able to shop in this way provision in store may be satisfactory but for those restricted by factors such as mobility and transport, discussed previously, or work commitments this can pose a significant problem.

"Like I work shift work and some mornings I go in at quarter past seven til quarter to three, well there's no shops open at quarter past seven so the time I finish work at quarter past three in the afternoon there's nothing left... Teachers find it the same you know when they finish at four o'clock there's nothing which isn't fair there should be enough to go round everybody you know no matter what time you went shopping but they don't" (Female, aged 36-49, Islander, North)

In some stores participants felt the stock could be managed better to ensure shopping could be carried out at all times during the week. One participant who works shifts was very frustrated by these 'shopping days', with provision in store on other days being poor, and had taken pictures on her mobile phone of bare shelves in the meat, cakes and bread sections of the store.

"There's our shop" (shows me pictures on her phone of empty shelves – 3 pictures – meats, cakes, bread, it's all empty)

Interviewer – Why do you have those pictures?

"Because I was so mad when I went shopping one day I took pictures and the next time the bosses come down I'm going to show them"

Interviewer – Is it like that quite a lot then?

“Yes, I mean that was a Sunday, I was working all week, I hadn’t had a chance to do my shopping so I went in on a Sunday afternoon, I saw a couple of people one of them he was over from Skye working poor sole and on a night out and I just caught him and I said look at this and he said but that’s a Sunday and I said but that doesn’t matter what day of the week you go and do your shopping – ‘oh you should go on a Monday a Wednesday and a Friday, that’s your best bet’ and I said well that’s not how it should work...How are you supposed to when I’d been working all day on the Friday and Saturday?... I’d been working all week, I hadn’t had the chance.” (Female, aged 16-25, Islander, South)

Even in the North where deliveries are received daily some of those working shifts could not shop whenever they choose, as there would not be a full choice in store. It is this lack of opportunity of free choice for shopping days or times that participants felt restrictive and illustrates how even though shops are available and open the choice of shopping in store is still restricted. The large store in the North is open late when this participant finishes a shift however there would not be enough choice in store to do a full shop

“I usually tend to go one of the days, well I used to go after I finished work but now I’m on 12 hour shifts they’re not open at half eight at night, well not enough to do a big shop anyway so it just depends on my shifts when I go in”

“...Well by half eight no but you couldn’t go and do a shopping at that time because there wouldn’t be enough on the shelves”

Interviewer – And is it open at that time?

“Its open some days Wednesday, Thursday, Friday or something but no...”

Interviewer – What wouldn’t be there?

“Veg probably fresh fruit and vegetables, bread...” (Female, aged 36-49, Islander, North)

Participants suggest stores are not fully stocked at all times and there are definite preferred shopping days and times in all areas of Eilean Siar and it is this restriction

on times to shop which participants found frustrating and limiting with the result being food shopping dictates how time is spent.

4.10.3 Opening Hours/ Mobile Service Routes

The national survey (Dawson et al, 2008) found this sentinel to have the fewest opening hours. Over the 449 shops were open a median 76 hours per week and stores in the Western Isles were open a median of 57 hours per week. This may explain some of the difficulties some consumers had in accessing stores however, as no stores in the North open on a Sunday this is likely to influence the average. In regards to the food choices available out with 'shopping days' it seems choice is limited in some areas. Many consumers adapt to this variable availability of produce and shop at appropriate times. However, for those constrained by other commitments reports suggest the food choices available to them in store can be extremely limited at times. Several participants expressed their frustrations at the poor management of stores and how they regularly ran out of basic items and did not address this in future orders.

Time constraints and other commitments also affect some participants' access to other retail provision such as the fishmongers in the North and fish vans, which trade in both areas. Some felt the availability or access to fresh fish was poor. Several participants, in different areas, commented on the existence of mobile fish vans but lacked knowledge about where and when they could access them, with some limited further by other commitments.

"I mean in the sort of accessibility to it you know as I say there are these vans that go round and they go to certain places, certain days, certain times I couldn't tell you where they are, they're kind of poorly advertised in a sense and I probably wouldn't be available with me working full time to go to them anyway, I think, I even think there is a fish van that comes from Barra em on occasion em but I don't think it comes this far North I think it stops in Benbecula you know and stays there really so yeh"
(Female, aged 36-49, Incomer)

Knowledge of where and when the fish van was available was variable with some using it regularly while others only used it as and when they saw it. The mobile fish vans appeared to be poorly advertised with no better knowledge of these services in certain areas or sectors of the population, such as incomers or islanders. In Eilean Siar there is one fishmongers located in the North and situated out with the town centre in Stornoway. Again time constraints on shopping day/ time and travel arrangements meant this facility was inaccessible for some and influenced their consumption of fish. This consumer lives about 40 minutes drive time from Stornoway but purchases her fish for her household in the fishmongers

“Yes, well once a week we buy fish. I would get it oftener if it was in easy reach, but it’s in Stornoway. I buy it in the Islanders fish shop in, where is it now? It’s away down off the beaten track – it’s a good fish shop.”

Interviewer - But do you think, you said you would eat it more often if...?

“Yes, if it was in easier... even if it was... you have to be there in the morning. I phone over about 8 o’clock and order whatever I fancy. Otherwise if you weren’t in until about 10 o’clock there wouldn’t be... everybody comes early to get their fish because it’s good.” (Female, aged 66+, Islander, North)

For others the location of the store combined with limited time made the store inaccessible.

“Fish is one thing that’s quite interesting here. You don’t... I don’t eat enough fish. I do try and, I get a fillet of salmon from the [LGSC] so I probably have them about once a week or thereabouts. But there’s excellent fresh fish here and if I had more time I would go to the fish mongers in Stornoway, but it’s a little bit too far away. Essentially I finish work at 5 and my bus is at half past, so I can’t just nip to the [LGSC] and wheel round and get everything. If I work through my lunch I can head off half an hour early, but... And I love fish as well, but I just don’t, again, I don’t have time to get the fish is what it is.” (Male, aged 36-49, Islander, North)

As with access to general stores consumers comment on access to fish being affected by time constraints and the limited opportunity to access the fishmonger store or mobile vans and report this affects their consumption. Restrictions on access to the fishmongers were not limited to those living far from the store. Participants living closer to the store do not necessarily have the opportunity to access the store at the necessary times.

“It’s not too far from the butcher but a Saturday I don’t think you can get, I don’t think there’s much choice it depends what days the boats go out and in you see so on a Monday there’s no point going on my day off, there’s no point going that day because they won’t have anything because the boats only go out on a Monday I think, I think they come in on a Wednesday or something I’m not really very sure you know so it just depends what your looking for” (Female, aged 36-49, Islander, North)

Fish is one product that we are encouraged to increase consumption of but it appears there are difficulties in doing so for some participants in the Western Isles. Those who have difficulties accessing fresh fish are often those who are limited to shopping at certain times of the day or week such as those in employment or with travel constraints.

4.11 Parking

For many participants a car was essential in order to access stores or make access easier however, there were problems in some areas parking at the store. Due to the location of some stores there is either no or restricted parking allocated to the main food store. In this area there was only one main general food store available therefore this participant is just grateful it is there at all.

“The [SCS’s] good, it’s here and thank god for it... (Laughs) but it’s a bit small and there’s no parking and there’s all these restrictions we talked about” (Female, aged, 50-65, Incomer, South)

It is this type of attitude which led many, in areas like this one, to accept the store provision available as there is no suitable alternative. In another area there is a car park available at the store but on 'shopping days' and at peak times it is unable to cope with demand.

"And what happens is that, like last weekend I left work at twenty to seven and eh... you couldn't park at the [MGSC] because everyone goes there then and you can't get in and people end up just driving past it because before at the old [MGSC] you could park beside the post office, you could park out the road you know on the kerb but an you could park right down to [Hotel] or even in the car park at [Hotel] but there, there's no where to park but in that wee car park there so I think that people just say well what are we going to do but" (Female, aged 36-49, Islander, South)

For some the parking problem influences the day chosen to carry out food shopping going when the store car park is quieter.

"The other thing at [MGSC] that's a problem is parking I don't go on a Saturday because you can't park I mean it was always going to be tight, that was the old [independent] shop you see and that was all right that parking for them because people were up at the post office although I don't know how we managed even then really, although you could park opposite at the church hall or in the road but now [MGSC] the parking is prity poor." (Female, aged, 50-65, Incomer, South)

By 'driving past' at a peak shopping time or choosing a quieter day to shop participants may be restricting the food choice available to them as, discussed previously, food supply in store is variable and available on a first come basis. Therefore those deterred by the difficulties of parking could be sacrificing better variety and choice in store. Those who talk about parking problems at this store do not go to another store but return to this store at another time when parking is easier.

In the North some of the smaller stores and specialist shops in the town centre may lose custom as parking in the town can be difficult whereas the larger stores have better car parking facilities. The limited parking can affect store choice decisions.

“there are still two or three butchers but you can’t park that’s another key factor on where you shop is the parking especially in Lewis because the parking is very restrictive, you can only really park at night and that’s when the shops are shut there’s two reasons why I don’t use the local shops one is expense and two convenience” (Male, aged 36-49, Incomer, North)

Although most participants report ways of accommodating this restrictive parking it evidently impacts on their store choice decisions, shopping days/ times and the shopping experience which may, in these areas, have a knock on effect to the food choice available.

4.12 Conclusions

Participants’ perception of retail access is dependent on the stores available to them both within their local area and, for those with access to transport, further a field. Access is also determined by the food provision within those stores at the times consumers are able to shop. In terms of the main food store size of store is of particular importance as this determines both the range and the quantity a store is able to stock. Where the main store is small this limits consumers access to certain products particularly fresh items. Infrequent deliveries to the islands in the south coupled with the small store size requires consumers to shop on certain days and at certain times in order to access the optimum range of produce. Personal circumstances such as mobility, access to transport and time constraints limit consumers ability to access stores at the most suitable times and as such also influence experiences and perceptions of accessing stores.

In this study stores were classified by size in order to compare participants perceptions however, perceptions varied dependent on how participants used the store. For example largest store format available in Barra, in the south, was ‘small’ and therefore used for both main and top up shopping. For consumers in Barra the expectation on this store type is high, as it needs to provide a wide range of good quality produce to cater for all food needs of the islands population. However in the north small stores are generally used only for top up shopping therefore consumers

have a lower expectation of this store type. The national study (Dawson et al, 2008) found smaller store types stocked less of the HEISB than larger format stores. Although small stores in the remote sentinels stored more of these items than small stores in more urban areas. While this might suggest that small store provision is better in remote areas other store types available in an area must be considered.

Most participants in this study had adapted their routines and made other provision to ensure they could access stores at appropriate days and times in the week in order to maximise the choice and variety of food products available to them. There are instances where problems occurred for certain members of the community however these were often overcome, regularly with the help and support of other family members, friends or neighbours.

CHAPTER FIVE

STORE CHOICE, IN STORE AVAILABILITY AND FOOD CHOICE

STORE CHOICE

5.1 Introduction

The choice of store is dependant on the options available to those living in the area their and personal circumstances. Participants' choice of store was influenced by several different factors, these are discussed in this chapter and fall into the broad categories of consumer choice, practical or moral and ethical considerations.

5.2 Consumer Choice

These choices are constrained by social and spacial circumstances such as household preferences, habits and traditions, economic considerations, transport and restricted availability of produce.

The island location of the study area imposes spacial restrictions and limits the number and type of stores available to participants. Access to other stores outwith their immediate vicinity may be available but require long journey times or in some instances a ferry journey making this a less feasible option for many, at least on a regular basis. In some areas of the Western Isles the choice of store is limited to one or two options, which for many is not considered a 'choice', as participants are forced to carry out their food shopping in the stores most accessible to them.

5.2.1 Household preferences/ habits and traditions

The sample included a range of household types from single occupancy (23.2%) to 5 person (5.4%) households. These different household types had varying

requirements in terms of product lines and amounts required and this influenced the way in which participants shopped and their store choices. Certain shops were thought to cater for family requirements with offers on products such as crisps and fizzy juice, while others appeared to cater for a more elderly market and stocked more traditional types of meat and vegetables. Availability of products in store were matched to household requirements and contributed to store choice decisions.

Some of the participants reported that their store choice and food provisioning practices were shaped by habits and traditional routines of the area. Over half of the participants in the study were islanders (53.6%) and almost a third (33.9%) of incomers in the study had lived on the islands for more than ten years. These participants had links to the traditional way of life in the islands such as crofting and were accustomed to the limited choice in terms of store selection. The co-op is the main supermarket chain available in Eilean Siar with Somerfield's being comparatively new and only operational in Stornoway, on Lewis. As a result, a number of participants used the co-op with the familiarity of the store given as the reason for making this store choice

"The big shopping we do in the Co-op...My husband occasionally goes to Somerfield. As I said, I'm a creature of habit – I go to the Co-op!" (Female, aged 36-49, Islander, North)

Those living on the islands have a very clear idea about what they are looking for in terms of taste, quality and freshness of produce and this is related to their experiences of retail provision on the islands and traditional ideals of buying fresh produce from specialist suppliers.

*"I always remember it from my granny as well, you know, we used to go down shopping for her and it would be, you know all the wee shops that aren't there now, "I want my butter from Hugh Matheson's and I want my ham from such and such", you know and shopping as a teenager you used to be like "oh for f***'s sake", but now of course you can totally understand. The butter used to be made on a farm locally, so that's the butter, she wasn't going to buy any 'Scottish Pride' rubbish, you know. She wanted her local stuff and she wanted her local crowdie and that's the*

way they always used to shop. They used to shop every day and they used to get all their bits and pieces in all the different places and I suppose I've got a bit of that still in me." (Female, 26-35, Islander, North)

Many of the respondents had access to meat, fish or vegetables produced by local producers, or reared or grown by themselves, friends, family or neighbours. Local food was highly regarded in terms of taste, quality and freshness and food from the shops had to meet this high standard.

In purchasing certain product groups, such as meat and fish, many consumers choose specialist suppliers where these options were available. It appears these decisions are shaped by traditional habits and continue based on the quality and taste of the produce available from these suppliers. Some of the participants spoke of the traditional way of life on the islands where families had their own sheep and sometimes cattle for meat, hens for eggs, grew their own vegetables and went fishing regularly in order to provide food for the household. This traditional way of life continued in some areas although for some participants this had lessened over the years as a result of the modern way of life, work commitments away from the home and a reduction in available time. For those who were used to sourcing their food in this way it was regarded as the best way to achieve optimum freshness, quality and taste, choosing to shop at specialist stores such as the butcher and the fishmonger was a compromise in an effort to obtain produce of a similar quality and taste.

"Very rarely do I buy fish in the supermarket it's usually from the fish shop because being a harbour town the fish is landed in the morning if the weather's alright and sold in the afternoon em very rarely if ever do I buy in the supermarket. Here we have a different type of fish... in the supermarket here its basically the fish finger type of fish which to someone who prefers to take his fish off the hook and into the pan you might as well give me some chewing gum for all that flavour you're going to get from it so you know we're spoilt like that because that's what we're used to" (Male, Aged 50-65, Islander, North)

Generally, freshness was the deciding factor in where to purchase fish with the local supplier associated with ideas of freshness and superiority of the product.

5.2.2 Quality and Freshness

Quality and freshness were often discussed as instrumental in store choice decisions. These terms were most commonly used in reference to buying fresh produce such as meat, fish, fruit and vegetables.

Quality was given as an important factor particularly when buying meat and many of the participants choose a butchers' shop as the preferred outlet when it was available. In the shopping diaries a butchers' shop was used, at least once in the 7-day period, by 22% of those who completed the diary. In comparison to the meat available in the supermarket this participant commented that

"The quality in the butchers is great." (Female, aged 36-49, Islander, North)

Indeed ensuring the household accesses the best quality and freshest fruit and vegetables was the deciding factor for some in choosing where to carry out the main food shop. Some participants gave the quality and freshness of fruit and vegetables in a store as the main reason for choosing that store i.e. Somerfield's over the co-op in Stornoway or vice versa. These choices are made to ensure fresh produce has as long a shelf life as possible to reduce the frequency of shopping trips and prevent wastage, as participants felt the quality of fresh produce sometimes suffered travelling to the islands.

From these comments it is clear notions of quality and freshness are important to these consumers when making store choice and purchasing decisions. Participants' ideas of quality and freshness are linked to traditional supply routes, proximity of supply, knowledge of supplier, taste, appearance and shelf life of fresh produce.

5.3 Economic Considerations

5.3.1 Prices in Store

Choice of store often centred on those regarded as the cheapest particularly for participants with limited disposable income. However, this decision incorporated trade offs and assessments of proximity of store, quality, convenience and value for money for all participants irrespective of income.

In choosing a store for the main household food shopping this participant values a combination of variety of fresh produce, cost and the opportunity to purchase good quality own brand products in order to reduce the overall cost of the weekly food shop. As a student and single parent the household shopping budget was limited for this participant and her store choice was influenced by the quality and value for money offered in store

"I go to Somerfield yeh I prefer Somerfield range the fruit and vegetables are fresher there's more selection and the prices are cheaper, well I think so"

Interviewer – What kinds of things do you think are cheaper?

"The fruit and vegetables I find they're cheaper em ...now Somerfield own brands I mean they might be Somerfield's own name but some of them are excellent" (Female, aged 36-49, Islander, North)

Over half of participants organised the food shopping around another activity (52.6%). Those shopping in this way tended to use only one store due to time restrictions and the multi purpose nature of the trip. These multi purpose trips were often linked to the working day and therefore participants wanted to spend as little time as possible on shopping. However, those who travelled larger distances to reach the store, and where the shopping trip was the sole reason for the trip, were more likely to use multiple stores to access a variety of goods and take advantage of the offers available in each of the stores.

"I use the two. I do half and half. Because I don't know if you've been to the Somerfield in Stornoway, but it's quite a small supermarket really and they don't have as big a variety as the Co-op do. So what I try and tend to do is I'll go and get whatever I can out of Somerfield and then on my way out of Stornoway I'll call into the Co-op and get the rest of it, you know. So it also balances out money-wise as well. Because sometimes you can get stuff cheaper in Somerfield that you can't get in the Co-op and sometimes you can get good deals in the Co-op that you can't get in Somerfield. You know what I mean? So you really have to check both of them." (Female, aged 36-49, Islander, North)

Participants must have the necessary time and transport in order to shop in this way therefore this is a less viable option for those who link shopping with other activities or rely on public transport.

Participants utilised ordering services offered at small local stores to ensure items such as milk were available to them on a regular basis as supply could be irregular. Purchasing from the local store in this way was thought to be more expensive but weighed against the expense of travelling long distances to a cheaper store and the convenience of guaranteed supply resulted in local store selection. Specialist stores such as butchers were also thought to be more expensive by some but other participants felt the opportunity to buy a good quality product in the quantities needed for your household made it a more economical option than purchasing packs of meat from the supermarket.

"I go to the butchers, the local butchers in Stornoway rather than get my meat out of the Co-op. I stopped getting my meat out of the supermarket. I try and tend not to get them out of the supermarkets because; again when you've got a family, they don't sort of cater for families, as such. When it comes to, say, chicken fillets for example, you're getting only 3 pieces of chicken. Now if you've a family of four or five, you know, even just a family of four, more often than not families are four, you have to buy 2 packets. Do you know what I mean? You'd end up having to buy 2 packets and you're either wasting 2 pieces of chicken fillet or you're having to cook that extra, so that, you know... and not just that, you know they're very thin." (Female, aged 36-49, Islander, North)

The larger range of produced stocked in a specialist store allowed participants more freedom in choice of product. The choice of day and time to shop was also more flexible as the more comprehensive stocking of these specialist products meant they were less reliant on store delivery times to ensure the products they required would be in stock. In a similar way the ordering service provided by some of the independent retailers also allowed this flexibility in choice and confidence in the availability of the products when participants were free to collect them.

In this study many of the stores used for the main household shop were small in size (less than 3,000 sq ft selling area) and this may have contributed to their inability to stock various pack sizes. In larger supermarkets on the mainland there is sufficient shelf space and a large enough customer base to stock various products in differing quantities whereas this may not be feasible in these more remote areas with small populations. Although the lack of larger pack sizes available in stores was a comment frequently made by participants, there was no alternative supplier therefore although noted and a restriction on the options available to them it may be less of a consideration in the store choice decision.

5.3.2 Dividend

The co-op offer a dividend scheme where customers get money back twice a year dependent on money spent in store over the previous months and this incentive was mentioned as a factor influencing store choice decisions. Although not a sole determinant of store choice the dividend was often a secondary incentive. Where participants felt stores provided a similar choice the incentive of monetary returns from the dividend card meant some participants choose this store.

“Because you get your dividend, you know, you get so much money back, depending on how much of their own products you buy, and, I think it’s on fruit and vegetables and milk as well, so that’s the main reason. And it’s roomier, it’s bigger...I would say there’s probably; there’s a good choice in both of them, yes. Certainly better than, you know, what there was em years ago and

there's things that you can't get in one that you can get in the other" (Female, aged 36-49, Islander, North)

However, even for those on the most limited budget it is not enough for the store to offer the cheapest produce, store choice must fit with the daily routine. For this single mother, shopping daily to control her budget, the household food choices are often shaped by what is on offer in store to minimise costs but the store she chooses is not the one she regards as the cheapest but the one which fits best with her journey home on route between college and the bus.

"Well usually Somerfield was where I was doing my bulk but because the college is close to the co-op I've been going and doing my daily shop in the co-op"

Interviewer – And which one do you prefer?

"I prefer Somerfield because it is cheaper than the co-op for the food that I buy plus they have more bargains, you know more BOGOF bargains in Somerfield than the co-op" (Female, aged 36-49, Incomer, North)

Economic constraints and incentives play a part in store choice decisions but other factors such as quality and convenience must also be in place to support the decision with 'cheapest' not enough to determine choice of store.

5.4 Practical Considerations

Organising the shopping around daily routines and other practical considerations is perhaps the most pertinent in choosing where the food shop is undertaken. Factors participants considered included transport, variety of produce in store and ensuring the choice of store was fitted conveniently with both personal and store routines.

5.4.1 Convenience

The 'convenience' factor was specified as the most common reason for store choice decisions. However, this concept of convenience was found to have different meanings between individuals, households and communities. Convenience was discussed in terms of geographical proximity to the store and a common determinant of store choice

"it's just down the road and it's because of the convenience of it"
(Male, aged 26-35, islander, North).

For others shopping is linked to another activity, with 27% of shopping trips in this study linked to the working day, due to distances from the store and related time and expense.

"I usually go to the co-op purely for convenience more than anything else because it's just down the road from where I work"
(Female, aged 36-49, islander, South).

Shopping diaries revealed a three times a week shopping pattern for many. It is regarded as convenient to shop this frequently as this is in line with store deliveries and ensures a wider choice of products with the concept of fresh produce linked to this pattern of shopping.

"I go three days normally a week, when the fresh stuff comes in"
(Female, aged 50-65, islander, South).

Participants regard their shopping routine to be convenient. Participants were adapting their shopping routine to match supply of products in store and regard this as convenient because it ensures products are available to them. Although shopping routines area fitted in with every day routines they are ultimately shaped by food availability in store with personal circumstances secondary considerations. In this way shopping practices are habitual and embedded in traditional norms for the area.

For others this frequent shopping pattern is regarded as inconvenient and provision unacceptable and they prefer to use stores on the mainland for bulk shopping. For these individuals this is regarded as more convenient as they can buy in bulk and then ensure food is available at home as they need it. Although these participants still shopped regularly in stores on the islands, bulk buying on the mainland reduced their dependence local stores with their irregular supply and reduced time spent food shopping on a weekly basis. One participant reported doing

“all our shopping in Makro so we only buy fresh stuff locally cos we have a freezer out in the shed where we buy all our meat and bread and everything in Makro, we buy our toilet roll and our kitchen roll and you name it’s like an Aladdin’s cave...” (Female, aged 36-49, Islander, South)

In most instances these mainland shopping trips are linked to family holidays, work or hospital appointments. For these consumers, who tended to be those living in the south, the extra effort required travelling to the mainland and the preparation for storing as well as the additional cost of running extra fridges and freezers is outweighed by the financial savings made and the convenience of having these products in their home when required.

Similarly, purchasing large quantities of meat from local producers is regarded as convenient to ensure the product is available in the home as required. Again this requires a large financial outlay and adequate storage facilities to make this a feasible option. For some, such as the elderly the idea of storing this amount of food is not feasible, preferable or affordable.

“Well that’s what we’re working on I have a closet over there and I think I can get one in there[additional freezer], I will have to do some measuring before I buy one but that’s what I’m hoping because I don’t have any room, the kitchen is like... if you want to look I’ll show you its awful...” (Female, aged 66+, Incomer, South)

This pensioner had plentiful access to local produce but limited storage space and talked about saving for an extra freezer and the problems of fitting it in her small home

However, some of the participants, especially the older generation, disliked freezing produce as they disliked the perceived changes in taste and consistency of the product after freezing. These examples of storage difficulties and preferences in terms of preserving fresh produce show how choosing to bulk buy can not be an option for all. For others transport issues and economic considerations inhibit this choice.

5.4.2 Accessing Stores

While three quarters of participants had access to a car for food shopping the other quarter were reliant on public or other transport services. For those living in some of the more remote areas in the study availability of transport can affect store choice, although none of the participants cite transport as the primary factor in determining store choice. Due to transport services the closest store is not necessarily the easiest to access and this has time implications for consumers and can reduce the customer base for the smaller local stores.

Elderly and less mobile participants were also reliant on transport services such as the 'shopping bus' which determines where shopping is carried out on a weekly basis. This weekly service alternated between the two largest stores in the area and although this determined where this participant carried out her weekly shopping she exercised flexibility in her choice of where to carry out her main shop, with the selection on offer and her preference for a particular store being the determining factor.

"Oh I like the [MGSC] better because the [MGSC] has a lot more and I think with them having a lot more customers I think there fruit and vegetables are a lot fresher you know they sell more and they obviously restock more and the [MGSC] have a lot more that [MGSI] have. So when we go to the [MGSC] I have a good buy

in and then the next week when we go [MGSI] I have a catch up you know milk, bread and anything else that I needed” (Female, aged 66+, Incomer, South)

For those without access to a car the available transport options can influence store choice however, other factors such as variety in store and personal store preferences still influence the overall store choice.

A number of individuals living further from a store or with out private transport were reliant on mobile grocery vans in order to supplement their food shopping needs. None used grocery vans for their main shopping but they were essential in providing top up shops between larger shopping trips. Although these were regarded as an expensive option participants ensured they gave the mobile van regular custom to support the local business and maintain what is a traditional shopping service for these remote communities. This ensured they remained available for when they were housebound.

“He [grocery van owner] was a local and he was for ever stopping here his father was here, I think his grandfather was here so it’s carried on”

Interviewer – So you like to buy something from him?

“So I like to buy something from him because well maybe on a wet day or a very bad day that you can’t get to the shops it’s handy because he passes the door except that the only thing is that I find him a wee bitty more expensive” (Female, aged 50-65, Islander, South)

5.4.3 Restricted Range of Produce

In some areas of the south, particularly on Barra, store choice decisions are dictated by the restricted availability and variety of produce in store. Participants often used a number of stores in the area in order to get all the products they required for their household. They also felt it was important to spread their custom over the few stores available to support the local business. By supporting all the businesses in the area it is hoped they will continue to provide a competitive service and therefore maintain

the choice of stores and produce available locally. This is a time consuming activity and requires participants to invest this time and effort into sourcing a range of quality food for the household. As such this may not be feasible for all participants and therefore food choice options may be compromised as a result.

“I feel you need to spend some money in the co-op here because we need it here we can’t live without it, so you have to support it so I tend to try and support all three of the shops of the food shops... because I think it’s important we need the three of them they all do something different and it’s important, you do pay more in the other shops the smaller shops but they in turn pay more to buy the stuff and so it’s just one of those things that you have to live with” (Female, aged 36-49, Islander, South)

Limited availability and choice of produce in the smaller local stores was reported as restricting the store choice of some participants, particularly those living larger distances from the larger stores. Some participants would have preferred to shop in the smaller stores closer to home and use the extra time saved travelling to and from the larger store for other more enjoyable activities such as gardening and craft activities and also to reduce the travel costs. For these participants their store choice is shaped by availability of produce in stores and they must travel large distances in order to access the produce they require.

5.4.4 Variety and Selection

The variety of produce in store was cited as the principal factor in store choice decisions. Where there was a poor selection of produce in the local store a number of participants travelled to a store further from home, trading convenience for journey times and choice. Even those reliant on public transport were inclined to travel larger distances in order to access a larger variety of produce.

“ I would rather it to Sollas it’s got more of a variety it’s the same thing in Sollas every week if I happen to pop in from my work it’s the same things they have I wouldn’t go to Sollas on a regular basis but if I go by on my work and I happen to have run out of something I’ll pop in but you know if I’m short of

*something I used to but I don't think it's good for shopping at all I
'd rather Creagorry anyway it's well ahead of it"*

Interviewer – So what's better about the Creagorry co-op?

*"They have more of a variety and they've got different things now
and again whereas they haven't in Sollas" (Female, aged 36-49,
Islander South)*

For this participant, reliant on public transport, top up shops are carried out occasionally in a store which is on route to and from work but a special trip is made for the main shop (21 miles from home).

The idea of choice both between store and choice in store was very important to participants and larger shops were associated with wider product range and greater shopping satisfaction. For those participants choosing variety as the primary determinant of store choice proximity to store and notions of convenience were less important and participants did not mind travelling larger distances for an increase in product variety and selection. In terms of store choice decisions it appears consumers were more concerned with the availability of produce in store rather than having a range of stores to choose from. However, where available, participants did appreciate having access to specialist retailers such as butchers and fishmongers.

5.5 Moral and Ethical Considerations

Participants' choice of store was influenced by moral and ethical considerations such as supporting local businesses, having the option to purchase fair trade, organic and free-range produce, often contributing to the store choice of participants but to varying degrees.

5.5.1 Supporting local business

Store ownership was found to be important in deciding where to shop for many in these small rural communities and rated highly in the decision making process. There was only one privately owned supermarket in the South and shopping diaries

found one fifth of all shopping occasions in the South took place there (Chapter 7), although the store was not accessible to all without long journey or a ferry crossing. For those living closer to the store but with a medium size co-op nearby with comparable product choice, supporting a local business was the deciding factor in store choice

“I think eh generally there’s a wider selection of the things that we prefer eh felt that veg and fruit was a bit better and there’s a greater selection of food as well so eh we opt for that plus also that this person is a local person who we like to support local business as well so as opposed to national companies so...But I shop there for the reasons that I’ve said you know it’s a local business and it takes on local workers as well as does the co-op but I would sooner support a local in business than a national company like the co-op” (Male, aged 50-65, Islander, South)

While few of the participants used smaller local stores for the main shop, only 2.9%, many felt it was important to support these stores and purchased the items available there. Local independent stores and community co-ops were viewed an important part of the community, frequently referred to as ‘*our shop*’ used inferring a personal attachment.

These types of food retailers were stated as important as they provide a service to the community, sustain local jobs and retain the social aspect of shopping, by providing a place to meet and interact with others. This was seen as important in these remote communities. Participants made an effort to use these stores for some aspect of their shopping in order to ensure the service remained.

“You know, we do feel that because we do live in a small community we have to support it.” (Male, aged 66+, Incomer, South)

Similar ideals of supporting local producers and businesses were apparent. When participants decided where to purchase specialist items such as meat, fish and vegetables participants felt it was important to support local producers and often commented they would buy more local produce if it were available. Participants

who shopped at local producer sales (a type of farmers market) often commented that everything would be gone by lunch time and there seemed to be a demand and support for local produce.

5.5.2 Ethical Shoppers

Despite store choice options being relatively constrained participants still expressed influences on their store choice decisions such as those with an ethical ethos or fair trade and organic produce options.

“I quite like the Co-op. I try to be an ethical shopper and I bank with the Co-op as well, so that’s probably the main reason I stick to the Co-op.” (Male, aged 26-35, Islander, North)

The importance of such factors varied between participants with some merely commenting that the option would be nice. For these consumers the opportunity to purchase fair trade, organic or free range produce is taken when available, for example at a local producers sale or free range eggs from a local crofter, but in the main this is regarded as a ‘luxury’ rather than necessity.

5.6 Summary

For some participants store choice was a simple one however most decisions considered different priorities and combined a number of factors to reach the final choice. For most a compromise between variety in store, convenience of accessing the store and personal preferences was required in order to accommodate the needs and principles of the participants within the confines of stores available and daily routines.

IN STORE AVAILABILITY AND FOOD CHOICE

5.7 Introduction

Store choice decisions were often influenced by availability of produce in store. Participants reported variable or inconsistent availability of produce in many of the stores throughout Eilean Siar due to stocking patterns and delivery schedules as well as inconsistency in ordering. These and other issues, such as the range and variety of items stocked along with the quality of produce, influence consumer perceptions of availability.

5.8 Range and Variety

Perceptions about the range and variety of products available, such as fresh fruit and vegetables and particular cuts of meat, varies between stores throughout Eilean Siar, primarily due to the size of store. This opinion is consistent with results from the national survey which found only large and some medium size stores stocked the entire HEISB (Dawson et al, 2008). Considering availability by food group Dawson et al (2008) found that large general stores stock a median of 100% of the items across all categories (fruit, vegetables, carbohydrates, protein, ready meals and dairy). Medium size stores have the same high level of availability with the exception of fruit items. Some participants find the products available to them adequate and are satisfied with the provision in store, particularly those who access the large and medium size stores in the North. However, consumers report disparity in the choice and availability within the medium and small stores with some stores better than others at maintaining stocking levels.

Items for which this disparity in provision was predominantly found were fresh fruit and vegetables. These items were most commonly found to be out of stock by participants and also more difficult to find substitute products for. For example a dried good such as macaroni was out of stock this could be substituted for another

type of pasta shape quite easily where as there was less likely to be alternative fruit and vegetables.

“It was more the fruit and veg I would say when it was coming up. I think they [MGSC] got their fresh stocks in but I think they get it every second day now but I don’t know if they did when I stopped but maybe the day before they wouldn’t have very much they let the stock get really low whereas [MGSI] is always well stocked”
(Female, aged 50-65, Islander, South)

Consumers understand, to some extent, that the variety and choice available to them depends on the display space in the store and the size of store can restrict the choice of products

“Ehmm... no the variety isn’t much but then the place is small so they can’t stock ... you know and you have to go in when the lorries have just been you know delivering” (Female, aged 36-49, Islander, South)

“Yep... it’s very difficult trying to shop here and trying to think what you’re going to eat, you end up eating the same things all the time cos there isn’t anything you know there is no other option” (Female, aged, 26-35, Islander, South)

As a result of this lack of space in store the variety and choices e.g. quorn products are limited which this participant finds particularly difficult as a vegetarian. While having a special or limited diet further restricts food choices in store work patterns and a lack of time also influences what is selected. One participant had several jobs and regularly used easy to cook meals and convenience foods but again found the product range restrictive.

“Like I say a lot of the stuff I eat is just ready meals and stuff I just stuff in the oven pizza and pasta stuff that’s quick and easy to make”

Interviewer – And can you get enough of that kind of thing?

“No (laughs) well you can but even last week when I went shopping in the [SCS] they’ve got pizzas on offer it’s like buy 2 for four pounds or something and they had ham and pineapple

and they had the pepperoni one but they didn't have the three cheeses one and you know its like... well I don't eat meat so"
(Female, aged 26-35, Islander, South)

But it was not only the lack of time available as she felt that the poor quality, limited range and availability of fresh vegetables impacted on her food choice and subsequent poor diet. She would welcome a choice of better quality fruit and vegetables, and pre-prepared vegetables to be available, in order to make healthier food choices. This choice would mean convenience does not have to mean unhealthy.

Interviewer – What kinds of other stuff that you want, can't you get?

"Well fruit and veg, nice fresh fruit and veg, like on the mainland you'll get packs that you just put in the steamer or bung in the microwave of fresh veg – I'd eat that but you just can't buy it here, it's not available so. I think I eat more unhealthily than I would if I lived else where or if the standard of food was a bit better"

Interviewer – So would you like to be able to buy more pre-packed vegetables which are just ready to be heated up – stuff like that?

"Yep, yeh cos then I would use them and I would eat that rather than more junk to fill myself up you know I would eat more veggies and stuff" (Female, aged 26-39, Islander, South)

This participant feels there is a limited range of products suitable for her vegetarian diet and the quality and range of fresh fruit and vegetables available is substandard. This negatively impacts on her perceptions of availability and the food choices she makes. However, in other areas and particularly the North, some of those who have lived in the islands for a long time have noticed a change in the variety of food stocked in the stores and this has had a positive effect on their food choice and their diet.

Interviewer - Has the way you cook and eat changed over the years?

"Yes, very much so."

Interviewer - How's it changed?

"There's more choice [fruit/ vegetables/ bread products/ sauces]. Definitely more choice available and you use things that when we were growing up you just wouldn't have heard of."

Interviewer - Do you think it's changed for the better?

"Oh yes."

Interviewer - Do you eat a wider variety of food now?

"Yes...well there's more of a variety, yes. Probably eat more [vegetables] as well actually." (Female, aged 35-49, Islander, North)

These consumers give different accounts of the food choices available to them but both suggest that increasing the variety, choice and quality of the fresh fruit and vegetables available to them increases the amount of fresh fruit and vegetables they consume.

Consumers talked about the limited choices as 'uninspiring' and food shopping as boring and monotonous which limits the variety in their diet

Interviewer – You mentioned the fruit and vegetables down here

"Oh I find them just totally uninspiring em I might get apples and bananas occasionally but the veg is poor I think compared with what they could do and they never have avocados or aubergines they used to in the [chain] which is next to the [MGSC] it's so small you would never believe that was the main shop"

"...sometimes people are a bit stuck for making something a bit tasty for tea em due to a lack of choice and variety of ingredients eh I can say its always the same stuff in the shops they won't try brown rice because they say it won't sell and I've said try and people will get used to it but they won't try it on that basis" (Female, aged 50-65, Incomer, South)

This participants' perception of this medium general food store (co-op) is 'disappointing' and 'uninspiring' which perhaps leads her to shop in a habitual

fashion in the store. It appears she no longer explores the choices available in the store as brown rice was recorded as being available in this store in the national retail survey (7 months previous) and at the time of interview (interviewer checked). This perception of poor availability has lead her to expect poor provision in store and suggests she no longer invests the time in store to explore the food choice options available.

Food choices are undoubtedly restricted in some areas with consumers finding food shopping and cooking a variety of meals challenging. Those who were confident cooks and happy to experiment with recipes and ingredients found the poor or inconsistent availability challenging to deal with and those who were not so confident resorted to repetitive meals and quick cook solutions such as burgers and chips.

“Yes it can be a bit of a drag, I don’t know how old people manage really if there’s ... you know if it’s... I suppose it’s when you are trying to look for something different if you take for example puddings and sweets, we mostly have fresh fruit for pudding, yogurt, ice cream well you buy a tub of ice cream and it’s vanilla and that’s it so you have a bowl of vanilla ice cream so it’s quite difficult really to think of imaginative things em having seen what’s available on the mainland I know I could be a much happier shopper. But I was saying to a girl in the [SCS] this morning it is actually a lot easier shopping in the [SCS] than it is on the mainland because em in a really big supermarket you get too much choice and we’re not used to that” (Female, aged 50-65, Incomer, South)

This participant suggests she would be a happier shopper if a greater choice was available however, concedes there is too much choice on the mainland. Perhaps there is a balance to be achieved somewhere between the two extremes. Living in this remote area, participants accept there will be some items that are not available to them, therefore accommodate and adapt to the food supply they have available and enjoying these items when they have the opportunity, such as during trips to the mainland.

5.8.1 Accessibility of Products

One food type which consumers expect to be available and one which some have difficulty accessing is fish. Many find this disappointing given their island location. Islanders have traditionally had access to local fish as fishermen were often family members and brought home fish for the household. Some participants thought most of the fish and shellfish caught locally was exported to other countries. Although some fish was sold locally fish and shellfish exports make up the largest proportion of total food exports (Scottish Government, 2008). This participant, whose husband is a fisherman, reports how this source of fish has declined over the years

"We don't get as much fish as we should get from a fisherman but we do get prawns and crab claws. Em we don't get as much fish as we used to get but you know every now and again he'll appear home with something"

Interviewer – Why don't you get as much as you used to?

"I don't know I think it's a lot scarcer, like I say I was in Eriskay (25 years ago) and aw fish, fish, fish, fish for today, fish for tomorrow, fish for yesterday, fish for the next day, always fish and potatoes because we had our own potatoes and my dad was a fisherman and my uncles' a fisherman and their uncles were fisherman so my dad would bring fish home, my uncle would send us fish, the next door neighbour would send us fish, so it was always fish but I mean I do so like I say we don't get as much fish as we could get living on an island and to buy it, it's very expensive and we think that's, that doesn't seem right to us that we should be paying so much for fish when we are surrounded by fish and fishermen but I mean it's a case of having to, having to buy it"

(Female, aged 36-49, Islander, South)

For this participant her fish consumption has been greatly reduced as a result of the reduction in availability from the fishermen in the family. This participant lives in the south of the islands where there are no fishmongers but there are mobile fish vans. However, she works shifts and does not know the day the van visits the area or where he would be when or if she had spare time. This coupled with the expense of

purchasing fresh fish means she no longer consumes as much fish as she did in the past or would like to eat now.

In another area of the south, where this participant lives and works she also finds there are limited opportunities to purchase fresh fish, a finding consistent with the national retail survey

“Em again fish, there isn’t a great deal of opportunity to buy fish here would you believe it and the opportunities there are aren’t that great... I would like to eat more fish than I actually do certainly and I know there’s a little van that comes round, there’s various little vans that come round but they’re never really when I can get to them and there is a fish shop in Kallin but”

Interviewer - Sorry where’s that?

“...what I don’t like about that place when I have been on occasion is things, quite a lot of the shell fish is actually cooked, em they cook it which I object to you know I’d rather cook it myself so I do know where to go say if I wanted to have prawns for example. Langoustines or whatever I know that I could phone one of the fishermen and ask them to keep some for me em but it’s just the hassle of doing that really you know so I don’t do it very often”

Interviewer - Would you rather be able to buy it somewhere?

“Em ...yes but having said that I don’t know whether I would do it enough you know what I mean its nice to know that things are available but I wouldn’t specifically travel to go and get things em but I’m quite disappointed in the lack of fish here” (Female, aged 36-49, Incomer, South)

In this area the only specialist fish retailers are mobile vans or a shellfish factory shop. Although this participant feels provision in the area is poor and would like to consume more fish she is not sure that an increase in availability of the product would increase her consumption unless it was also easily accessible. Mobile fish vans are not available to all as they do not go to every area and are usually during the day; therefore those working during the day are often unable to access these. The

shellfish factory is located on North Uist and difficult for some to access due to time restrictions and the distances those living on other islands would have to travel.

Several participants report consuming fish regularly with family members catching fish for the household either as the sole provision or to supplement that bought from stores or mobile vans. Those who had fish caught by a member of the family or given to them by local fishermen were more likely to consume fish on a weekly basis

“Yes fish maybe about once week”

Interviewer – And where do you get that from?

“Well my husband either goes out fishing or my son always went out fishing a lot during the summer so I’ve quite a lot of fish in the freezer and also again from [MGSI] and there’s more fish vans going round now so you can actually get fish on the island now whereas about 5 years ago it was quite difficult to get fish on the island”

Interviewer – Really?

“Yes because the fishermen were going and catching prawns and there were no kind of you know white fish fishermen so there was no fish came in but I think there must be, well there’s a guy comes over from Buckie with fish caught in Aberdeen once a week and his fish is supposed to be good and then there’s another local fish van so they must have a supplier”

Interviewer – So do you use that van then?

“Yes if I see it, if I happen to be at the same place and same time as the van so I wouldn’t actively go out and find it, if it just happened to be there” (Female, aged 50-65, Incomer, South)

This consumer perceives there to be an increasing amount of fish available for purchase on the islands but does not actively source it. She has access to fish by other means, as members of the family fish, and would either use this or do without rather than actively locate a fish van. This suggests an item such as fish, which can be substituted by meat to make a meal, must be both available and easily accessible to encourage consumers to purchase and consume. Few reported making an extra

effort to find out where fish could be purchased and instead relied on chance meetings with the fish van.

Indeed, another participant reported purchasing fish when it was available, easily accessible and affordable but stopped buying fish when sourcing became more difficult. Living approximately 36 miles from the store where she does her households main food shopping she feels that visiting several stores is too difficult, physically and mentally, dissuading her from making the extra effort required to purchase fresh fish for her household.

Interviewer - Would you buy fresh fish from the supermarket or the fishmongers?

"Well I haven't tended to, but there used to be a fishmonger that used to come round from Banff and he used to come over every week and he would have a wide variety of fish, you know. So when he was here, I must admit I used to buy fish on a weekly basis, whether it be 4 pieces of cod, 4 pieces of haddock, monkfish, whatever he had. I did used to buy it and I would freeze it or use it that very night...But he stopped coming and, so going to the fishmongers and going to the supermarkets in Stornoway, they're a little bit more expensive anyway."

Interviewer - If the fish van came round again, would you use it again?

"I probably would. It's I suppose again, it's the fact that we go up to Stornoway and just don't think of buying fish. I think of buying all these other things. Whereas if you're only getting the fish van at your door you would buy that, do you know what I mean? If it was a meat van at your door, you'd probably buy whatever. But I mean it's the thought of going up to Stornoway, your mind's on so many other things. Making sure you buy enough of this, enough of that, that you don't think to buy fish or buy... It's not in the forefront of your mind." (Female, aged 36-49, Islander, North)

This consumer normally travels the 73 mile round trip to Stornoway once a fortnight with the primary purpose of the trip to purchase the household food supplies. However, it seems purchasing fish is not considered as high a priority as other food

products such as meat as she does not consider making an extra trip to the fishmongers on the edge of town or purchasing fish in the supermarket.

Consumers report an inconsistent availability of certain items and this applies to the supply of fresh fish as the mobile vans operating are not always reliable in certain areas. Some of these mobile fishmongers have stopped their rounds and this has affected the purchasing and consumption of fish.

“Fish, we used to have a fish van coming around but he hasn’t been round for ages, we’re really missing fish. We had fish out the supermarket, it was a box of breaded fish its just not the same and if I’m not over in town on a Friday when the fish is in fresh then I don’t get fish because I think other times I go I think it comes in Tuesday and Friday and sometimes when I go I’m not sure exactly when it comes in but there’s nothing left, smoked mackerel that’s it! ...So we miss the fish van because that used to come every week”

Interviewer – And did you get from it every week?

“Yes...Mostly cod fillets and skate and salmon occasionally and what else there’s mackerel and herring, [husband] loves fish he would have it every day of the week I would only have it twice but he would have it every day, the kids never used to like it but the older they get they’re starting to like it more” (Female, aged 36-49, Islander, North)

From this participants account it appears the regular supply from the mobile fishmonger encouraged this household to eat fish on a regular basis with the regularity of its offering at home having a positive affect on some of the children’s liking for the product.

5.8.2 Inconsistent Availability in Store

Store size and the lack of space available in store to stock a wide range and variety of products have been discussed previously. Generally consumers understand the

physical space limitations however, consumers also report inconsistent availability of the items stocked in store, which can be more problematic

“...they’re called the butchers but they actually are the paper shop and they sell petrol and general groceries they’re not licensed but they sell everything else and there is a meat counter there as well, that’s the only place that you can ever buy things like kidneys if you like doing steak and kidney or a mixed grill or anything like that they have them occasionally but possibly not when there’s bacon on sale as well! Or if you can get the kidneys there may not be any steak on the island, things like that happen all the time” (Female, aged 50-65, Incomer, South)

Participants felt the irregular stocking in store was problematic and difficult created problems in terms of planning shopping purchases, preparing meals and managing the household budget. Although sometimes difficult to manage it is an aspect of living in an area with limited store choice options which participants become accustomed to and find ways to adapt meals or make alternative choices. There is a sense of resignation to this situation and having to adapt is often accepted as the norm. For many consumers this is only a minor inconvenience and can be managed but it can be tiresome and has a negative effect on their perceptions of retail provision and food availability especially when it affects basic food items. Running out of goods seems to happen with some regularity in certain stores leaving participants frustrated with store management.

“prawns as well, I like the frozen prawns and the [SCS] has them sometimes and then they don’t have them you know and you go to the [SIS] and because the [SCS] out of them the ones that are in the [SIS] are gone as well you know that kind of thing.” (Female, aged 50-65, Islander, South)

Due to the remote geographical position of these communities consumers have limited options for shopping and due to the irregular availability some panic buy items, as the option to purchase elsewhere is not always possible. This can mean there is nothing left for others. Combined with the irregular ordering by stores

participants can find even basic items such as potatoes, bread and milk unavailable when they visit the store

"Its just more things not being there when you go...Yeh that's more annoying... Especially when we just can't go somewhere else and get them" (Female, aged 16-25, Islander, South)

One participants' initial thought was that many items are unavailable but on reflection concludes it is less common than her initial response indicated. Perhaps it is the inconsistency in supply and constant uncertainty which has a negative impact on islanders perceptions of availability.

"Oh yes there will be... eh yes ... em rather than be specific there are things that you only get at certain times you know and if your not there then they go or they might have it through the back who knows but its not out. Eh sometimes your looking for chicken quarters ... and they don't have them... eh what else...em I can't think ... I suppose not a lot you know its unfair to say I suppose more exotic things if you were looking at a recipe. My friend she was complaining there were no leeks when she went there the other day well that's a basic item but maybe say fresh raspberries you know strawberries or something maybe your having people and you've decided your having them specially and then when you want them and you can't get them you know, maybe that's, it's always when you're wanting something but it's not there" (Female, aged 50-65, Incomer, South)

This issue of inconsistent availability again varies between stores and different areas within Eilean Siar. Stocking levels in store appear to be more inconsistent in the South islands where the deliveries are less frequent than in the North and the stores are smaller in size. However, within the South there are also differences in product availability between stores. Interviews suggest this can, in some instances, be attributed to store management with some of the smaller stores having a more consistent supply than some of the larger stores with a greater stocking capacity. Sometimes this irregular or inconsistent availability can be attributed to the weather causing ferries to be delayed and most consumers accept this as part of living in a remote island location and say they do not get angry or upset when this happens and do not blame the stores. However, participants are less accepting when availability is

poor for other reasons such as the stores failure to plan for increased demand in the summer time with the arrival of tourists with what appears to be no subsequent increase in ordering by the stores

“In the summer time if you don’t get to the shop on the right day then there’s nothing there, you know there is no bread and sometimes in the summertime there is no milk either now in the winter time you can tolerate that because you look out the window, you know the weather’s bad you know the boat’s not going to get in but, the summer time” (Female, aged 36-49, Incomer, South)

5.9 Quality

Having good quality produce and particularly fresh produce was something which participants aspire to. As with the range and variety of produce available, the quality of produce also varies between products and stores and this has an influence on purchase and consumption of certain products and perceptions of availability. For items such as fresh fruit and vegetables they must be of reasonable quality in order for participants to purchase them. As the following quote shows, the quality of fresh fruit and vegetables has a direct impact on the amount consumed by this woman and her young family

“I think they [children] prefer the fresh, you notice it when your away cos you get all the fresh nice stuff and they gorge themselves on it and you come back and its like back to the same old yuk.”

Interviewer – and do the kids eat more when they are away as well?

“Yeh, cos you know you get the selection there, you know one supermarket to the next and they have competition they have to have... [SIS] here gets em...last week they didn’t get a lot of fruit in cos they hadn’t sold it the week before bananas and stuff an I always buy it out of there cos if you buy it out the [SCS] you’ll buy them and they will look nice on the outside and they will be rotten mush on the inside so I always buy them in the [SIS].”

Interviewer – So is the [SIS] better for fruit and veg?

“Fruit and veg - yeh, yeh it’s nicer – fresher for whatever reason. But last week they didn’t get cos they hadn’t sold the week before so it’s a hit or a miss.” (Female, aged 26-35, Islander, South)

This quote suggests the quality of produce not only varies between the stores but also within stores on a weekly basis. In this instance the consumer perceived the quality of fresh produce to be poor and, on this occasion, was further restricted as the independent store she used had reduced the amount it ordered due to poor sales the previous week. On this particular island there is only one other store in which this consumer could purchase fresh fruit and vegetables but she referred to their produce there as ‘rotten mush’. Therefore, she does not purchase fresh fruit and vegetables from this chain store and finds the stock irregular in her regular independent store.

Due to the remote location of the Western Isles and certain islands in particular, such as Barra, there are limited store choice options available (n=3 small stores), which combined with the limited shelf space in store, means consumers must purchase the items available or do without. Therefore participants reported purchasing items they would otherwise not choose to buy.

“Em I don’t like having to buy bags of apples when one or two of the apples in the bag are obviously bad and I’ve had that happen, especially in the smaller shops not so much in the [SCS] or you know you buy a pack of tomatoes and one of the tomatoes is all mouldy round the back I mean these things happen a lot I think the [SCS] try to sell things off cheap in the afternoon if they’ve reached their sell by date but they seem to go mouldy and bad long before their sell by date sometimes and fresh chickens have been a problem in the past in the [SCS] even when they are well within their sell by date when you take off all the wrapping you just want to throw it away and I ...[smell]” (Female, aged 50-65, Incomer, South)

Participants’ quality expectations are based on personal experiences. Participants with access to local produce such as fish and meat had expectations of quality linked to freshness, which exceeded the quality of produce available from stores.

“my partner used to fish, shell fish and he’d fly fish for salmon, sea trout and eh so once you’ve sort of had that on your plate em again stock up the freezer when you can you don’t really em like

buying the stuff in the packets, the plastic packets that kind of looks very unappetising somehow ...” (Female, aged 36-49, Incomer, South)

Although remote consumers have lower expectations of retail provision and variety of produce which should be available in store some appear to have higher quality expectations due to the fresh produce they have been able to grow, produce and source locally.

5.10 Stocking Patterns

Another factor contributing to product availability in store was retail stocking and delivery patterns, particularly in the chain stores. Participants reported various items being stocked at one point and then no longer stocked, e.g. certain brands of butter, cuts of meat, types of bread. Participants enquired in store as to why this happens and were informed by store management that decisions are made at a central distribution centre on the mainland. These decisions were determined by size of store and the ‘plan’ attributed to that size of store: participants describe the ‘plan’ as the list of items that each store can order and is determined by the size of store.

“the only bad thing about the [MGSC] is they have lines and it might be something you really like and you get used to it and then it disappears off the shelf which I don’t understand because if its disappeared then it must have been sold so why stop it but of course they’re controlled by the main co-op they can only sell what they’re told to sell...”

Interviewer – What kinds of things is it that disappears?

“... Now a prime example was nimble bread I could only eat nimble bread because it doesn’t give me heart burn so there must be something in it or not in that’s in other bread, it just disappeared so I said to the girl where’s the nimble bread gone and she said they’d been on to them and they said there wasn’t enough call for it but I said your talking about the mainland this is different up here we’re completely different up here, the nimble bread sold up here but again because it was on this list that goes through the system so no nimble bread ...completely disappeared the bread without finding out that we still ate it because they got a

delivery in and it went so we must have and they only get a little in now so you have to be quick because they don't get much of it...That's another thing that disappears is some of the meat you know you get used to it you think that was nice and then you don't see it again so it must be trying them out you know one off things"
(Female, aged 66+, Incomer, South)

This participant mentions several different items, which have 'disappeared' over the years some of which she could purchase elsewhere or substitute with other alternatives. This variable range of product lines can have a positive effect on availability perceptions as these changes may allow more variety in the choice available but in these smaller stores it is often at the expense of another item i.e. a store stocks a different cut of meat however, this replaces the usual cut of meat and is not an additional choice. This may have a negative affect on opinions of the store and the service they provide as they are more concerned by the item that is no longer available.

The omission of some items can cause the cost of the products to increase with some basic items unavailable in some stores because of the 'plan'. Participants reported items being removed from the store plan and replaced with more expensive alternatives.

"Yeh, it's just not there anymore...you can get it with different kinds of cakes, the fruit at one time we were getting Macintosh reds and they were lovely and they were cheap all the young mothers bought them and the kids and then all of a sudden no Macintosh reds, you'll have a hell of a job getting a white cabbage over there now...We had to fight to get the stew packs cos we used to get them in the old shop fresh stew packs...It's all in one pack about four carrots, one parsnip, one turnip and two onions ...oh we had to fight to get them back on the shelf ...But they weren't going to do them- they weren't on the plan! ... You could buy them individually but they're cheaper in the packs"
(Female, aged 50-65, Incomer, South)

For many participants this is a very frustrating situation and although alternatives are available this limited or restricted choice gives a negative perception of availability. This consumer experiences this frustration as a result of the ordering policy of her local store. The 'plan' or store ordering policies in the chain store are controlled by

a central distribution centre on the mainland and 'plans' set according to store size therefore some stores can not stock certain items because of the size of store

"Cabbage I'm always after, I like cabbage and like cabbage for making coleslaw, all summer you couldn't get and I said 'how can you not get cabbage?' 'Oh we can't order it and we can't so oh and we have lots of people asking for that' White cabbage and I 'well does that not tell you something?' And they never, ever got it" (Female, aged 36-49, Islander, South)

Store deliveries can also be problematic as store employees report orders not being delivered or incomplete. Several participants described shopping just after deliveries have arrived in store and how the stores had not been sent the whole order i.e. less than ordered by the store on basic items such as loaves of bread. These issues of items 'disappearing' from the shelves and ordering difficulties all contribute to the problem of inconsistent availability of products making food shopping challenging and overall perceptions of availability poor. This inconsistent availability of products, in particular fresh produce such as meat and vegetables, poses such a problem in these communities as there are limited or no other options for food shopping.

In the South of the islands, participants commented on stores stocking non – food items. As these stores were the main food retailer and perhaps the only food retailer in the area participants would prefer stores concentrated on food products. Many of these stores were small in size and participants felt food choice and product ranges were compromised by the stocking of books, alcohol and festive gifts.

"Well there's lots of things, there's loads and loads of things you could complain about but then they have silly things like they had Christmas wrapping paper in for the last month or more [Interview - October]. We can live without Christmas wrapping paper you know and Christmas selection boxes and things there's plenty of time for that it's just proper general food and things we want you know things that you need every day, I don't know

whether it's just not being run very well or don't know what it is about it" (Female, aged 36-49, Islander, South)

"I just wish they'd stick to food instead of diversifying into Halloween stuff and frying pans and Catherine Cookson books and all sorts of weird stuff they stock at times and I think food should be their main thing really." (Female, aged 50-65, Incomer)

Stores where participants felt this was a particular problem were small in size and the main food retailer in the area. Participants considered the availability of produce to be compromised by non-food items taking up valuable space in the limited number of small stores.

5.11 Conclusions

Perceptions of food availability vary between individuals and are influenced by the range and variety of produce in the stores participants' use as well as the quality of the produce stocked. Although participants are willing to travel in order to access stores and do not expect as wide a range of produce to that available on the mainland, one aspect of food access remote consumers are not willing to compromise on is quality and expect the produce available to them to be of good quality. Produce may be available in stores but the poor quality and short shelf life of fresh produce such as fruit and vegetables in areas in the south such as Barra limits actual availability

Individuals' perceptions can be affected by work patterns which compromise the time available for shopping and individuals' access to alternative food supplies, such as home grown or reared and local produce. How participants use a store and their dependence on that store for their household food purchases affects their perception of availability in store. Those with access to a large supermarket had a more positive perception of availability to those reliant on small stores in the South where availability of food is more inconsistent.

CHAPTER SIX

SHOPPING BEHAVIOUR AND ADAPTING TO RETAIL ENVIRONMENT

SHOPPING BEHAVIOUR

6.1 Introduction

“Being organised” was essential in all aspects of food procurement and this ranged from organising shopping routines, cooking and storage to preparing the ground for growing vegetables.

These represented ways to manage the limited choice, irregular supplies in store and large distances many had to travel to carry out the main food shopping. The national retail survey found 22% of those living in Eilean Siar had to travel in excess of 25km in order to reach a medium or large general food store (not road mileage but direct line, actual distance further). Therefore it was important to ensure the shopping trip corresponded with store deliveries or are undertaken in conjunction with another activity to make best use of time and keep fuel costs to a minimum.

6.2 Shopping Routine

Shopping trips were predominantly organised around daily routines and store delivery patterns. In the Northern Islands the main shopping was primarily carried out on a Friday evening or Saturday when participants were less constrained by the working week, particularly those in employment. In the South shopping was generally spread throughout the week. Interviews revealed this pattern of shopping was planned to coincide with store deliveries and to ensure access to the freshest produce possible. Some participants said they would prefer to shop on a weekly

basis, which they regarded as 'normal', but this was not possible in the area in which they lived as there would not be enough fresh produce available or of sufficiently good quality to last the week.

"You know on the mainland they do a huge weekly shopping most people don't they?"

Interviewer – Would you like to be able to shop like that? Once a week...

"Yes, yes ... yes I would because then your spending more money because your running in and then your picking something else up, if you just go in and get what's on your note... I would like to do that, saves the hassle too of having to go three times a week"

Interviewer – So do you feel you have to go three times a week?

"Yes, yes, yep... cos they're very bad as well as date on, you're having to watch your dates [sell by] as well and sometimes the dates are old you've got to be careful" (Female, aged 50-65, Islander, South)

This pattern of shopping more frequently is less convenient in terms of the time required and was considered more costly as more money is spent in store as a result of multiple trips.

6.3 Planning

Planning when, where and what to purchase is an important part of the household food shopping for the islanders. As a consequence of the long distances to stores and inconsistent availability shopping trips are arranged to ensure access when food stocks are at their maximum and the choice of day and time to shop often reflects store delivery schedules. Travel time and costs are also taken into consideration when planning the shopping trip and therefore often linked to other activities such as work which can also restrict the day and time of shop.

Proximity to store directly influenced planning of shopping trips. The extent to which participants planned the main shopping trip varied in terms of when they

shopped and what they bought although those who shopped more frequently i.e. daily/ 3x per week tended to be more flexible with what they purchased in each trip. Those travelling longer distances to carry out their main shop or those more constrained by transport issues were more likely to plan what they were going to purchase than those living closer to their main food store. Those shopping more frequently, i.e. 3 x per week/ daily were less likely to plan their purchases and were more influenced by the foods available in store.

Many participants preferred to plan for a weekly shop but due to the lack of produce in store shopping 3 times per week was more common. This was regarded as 'disorganised' and 'haphazard' but they felt they had no choice but to shop frequently.

"So after years of family live and living on Barra I no longer have a specific shopping day or time, it's completely disorganised compared to the way it used to be." (Female, 50-65, Incomer, South)

6.3.1 Shopping lists

One way in which the shopping trip was organised and purchases planned was by using a shopping list. These were used for a number of reasons: to ensure all required items were purchased in one trip as return trips were not feasible; to aid participants with poor memory; or to plan purchases in order to save money. These lists were constructed in a variety of ways with some participants keeping a list in the home, which they add to between trips for items the household had run out off. Others wrote a full list before travelling to the store, particularly those living in the north and travelling long distances to the large store in Stornoway. For many these lists did not include the basic items, such as bread and milk, which were bought every trip but lists used for items purchased less frequently, such as sauces and oils. Alternatively shopping lists were constructed around meals. This took several forms, some participants wrote the shopping list after planning meals for the week and constructed the list around these, others preferred to select a range of products which could be made into meals at a later date.

Those reliant on some of the smaller stores for their main shopping were less likely to use a structured shopping list as the limited floor space (two isles) in store forced them to visit each isle. Participants were familiar with store layout, products stocked and unable to miss out isles therefore assume their memory will be jogged when they see the products. Others wrote a list but routinely forgot to take the list the store but the process of writing the list seemed to clarify what they needed to purchase in their mind.

Interviewer - Do you take a shopping list when you go shopping?

"When I remember to pick it up of the table"

Interviewer – Is that just so you remember what you are buying?

"Yes because I don't have a good memory you know when you get a bit older your memory goes a bit"

Interviewer – And do you manage to stick to the list when you remember to take it?

"No, course not cos you see so many other things and maybe its just a guide or some things run out and its not something regular then I write it down because I maybe wouldn't remember that. I mean I wouldn't put down milk, bread, cheese vegetables I don't need to put that down because you go in and work your way round the shop" (Female, aged 66+, Incomer, South)

Irrespective of whether a physical list was written participants checked what was in stock at home in the store cupboard. Ensuring the 'store cupboard' was fully stocked at all times was important and contributed to the idea of 'being organised' for times when produce was not available in store or they were not able to access the stores for some reason.

The cupboard survey confirmed participants had a good stock of the storable items such as rice, spaghetti, porridge and baked beans, with 58% of the storable items in the HEISB were in stock in over 50% of households at time of interview (See cupboard survey, chapter 8). Participants also had a good stock of fresh fruit and

vegetables in stock with 84% of the fruit and vegetables in the HEISB in stock in over 50% of households.

6.3.2 Household Composition/ Preferences

Food choices were determined by household preferences, which is unsurprising as this ensures the products bought and meals made are consumed and waste is limited. Most of the participants in this study were female (87.5%) and many said children and/ or partner's preferences were most important when making food choices. Although these preferences were accommodated most thought it was important for everyone to eat the same meals and would not make different meals for different members of the household. In some households this meant only cooking meals everyone would eat or adapting the same ingredients slightly to include the whole family in the same meal or using the same basic ingredients.

Interviewer – When you're shopping, there are five of you in the house; do you all like the same kinds of things?

Interviewee – No, no...no, no...there's always a few like my husbands away, my daughters away to Lanzarote so there's three of us just now, one son won't take curries and that and two will you know it's always two and one But he'll take ordinary chicken and potatoes so it doesn't bother me or if we're having lasagne he'll have ordinary mince and potatoes you know what I mean it's not too bad it's usually three and one or something like that you know so...

Interviewer – So you sometimes have to make different meals?

Interviewee – Yeh, well I don't mind doing that cos your better doing that and then they eat it rather than, it's better than eating rubbish isn't it? (Female, aged 50-65, Islander, South)

Adapting meals to fit with the families' preferences was seen as a way to make life easier, in that multiple meals were not being prepared and food would not be wasted or thrown away. This participant was able to cook multiple meals and this was reflected in planning the meals, constructing the shopping list and allocating time for preparation and cooking.

Those with more limited time, or who are not confident cooks, found it more difficult to cook multiple meals for the household on a regular basis. Restricted employment opportunities means some people have multiple jobs, work shifts or have long journey times to and from work. As a result of this, the time they have available for preparing meals was limited, particularly during the week.

Many participants talked about how their meals had changed as a result of having a family. Changes in meal composition and cooking habits occurred throughout family life from weaning through to when children left the family home. Family needs adapted to accommodate different tastes, health concerns and the time available for shopping, preparing and cooking. Participants reported consuming snack like meals when single, family meals signalled a return to more traditional meals such as mince and potatoes, stews and homemade soup. However, spaghetti bolognaise, lasagne and curries also fell under the definition of traditional meals for some. Meals which could be planned or prepared in advanced were popular for those who were working. Time for food preparation was limited but they felt it was important to provide a good home cooked meal for the children. After children left home there was often a shift back to lighter meals with less pressure to produce what constituted a formal meal every night.

Interviewer – Had the way you cook changed since your kids left?

“Em... a little, not vastly...Yes, there’s not so much pressure on having to have dinner I suppose when they were at home [husband] wasn’t about so much, he’s self employed now that’s why he’s about but I used to prepare the dinner at night you know for the next day and I suppose we ate more casserole type things because or I prepared it in the morning and we have a rayburn so I’d put the casserole in the warming drawer, you know it’s like a slow cooker type thing so I suppose we have changed. But we don’t need to prepare like that in advance so much we can just do it, I don’t tend to prepare the night before so much except when I am on my own and I make the bolognaise for coming home the next night” (Female, aged 50-65, Incomer, South)

6.4 In Store

Patterns of food shopping and food choice in store were influenced by several different factors ranging from what was available in store to household preferences, traditional recipes and meal plans.

Those who drew up a shopping list in advance used it to guide their shopping in store to ensure they bought everything on the list; however there was some flexibility around this to accommodate the availability or unavailability of products in store. Items which were unavailable during the shopping trip were substituted for other items not usually in stock added to the list in order to take advantage of a different choice. Planning meals ensured participants bought enough food while in store to last until the next shop without over buying, saving money and reducing food waste.

There were several ways in which participants adapted the way they shopped in store to accommodate what was available. Participants regarded 'what was available' as the most important factor in choosing what to purchase in store. In particular some of the smaller stores had a limited range of products, such as particular cuts of meat or vegetables but other items such as mince were available most of the time. A limited range of products was seen as monotonous so when different products were available participants tended to opt for these choices. Often fresh produce was bought in bulk and stored, even if not needed at the time because they may not be available during the next shopping trip.

"You can't really think oh I really fancy such and such I'll go and buy it because it may not be there, it's a treat if it is I mean the day I saw pomegranates in the co-op I came home with about half a dozen too many to know what to do with but it was just such a nice change to see them... But it would be nice to be able to buy cooking apples you know, I haven't made an apple pie for ages. To be honest I didn't look for cooking apples today you do get inventive you learn to make things like poached pears instead. Apples isn't really a thing you can grow here so"

“...its em how do I say it’s not a very active sort of shopping its reactive shopping all the time” (Female, aged 50-65, Incomer, South)

In cases where the ferry was postponed some participants felt the need to ‘panic buy’. This can result in queues when the postponed delivery arrived and individuals buy more than they need which accentuates the problem. Those who were reliant on the shopping bus or a home help or constrained by other commitments found it more difficult to purchase all the products they required in these circumstances if they arrived in store before the goods had been delivered or when the store was sold out following the rush to buy up the limited stock.

Participants tended to bulk buy products on offer as a way to save money. Many perceived food shopping in the area as expensive in comparison to the mainland and this was one way in which participants could adapt to the expense of food shopping in the islands. Dried goods and items with a long shelf life were often bought in bulk when on offer. However, due to the restricted amount of shelf and storage space in store items on offer were often sold out before participants could take advantage of these offers. Although these items could often be substituted with another product or bought at a later date the limited availability and choice affected participants perceptions of retail provision and their ability to be a ‘smart shopper’⁸ (Piacentini et al, 2001).

“the deals like stuff here if there’s ever offers like BOGOF or buy 2 for... there is only ever one of something or there’s none of it left or you know... it’s very rare you find something’s actually in stock. Like as a special offer, like occasionally I do get but not a lot, as I say it is getting a lot better than it used to be it used to be a lot worse than it is now but it’s still horrendous (laughs)” (Female, aged 26-35, Islander, South)

⁸ Smart shopper – take pride in ability to take maximum advantage of retailers’ offerings i.e. sales and discounts to get best value for money.

6.4.1 Store Layout

Store layout and in particular store size is an important factor in participants' perception of food access and has a direct impact on the food shopping experience and the food choices available.

In the largest store (Greater than 15,000 sq ft of selling area) in Eilean Siar the available floor space offers consumers a larger choice of products and the space to take time over shopping. It is this opportunity to browse in store that allows participants time to look at new products, read packaging and enjoy the food shopping experience. This space in store allows the shopping experience to be more relaxed with time taken to explore new food choice options. One participant explains how she likes to take time when carrying out the household's food shopping and buy different products.

"Usually if I'm food shopping I like to browse yes, I like going on my own and just browsing and just having a look around at the stuff I don't normally buy. That's the kind of thing I like to do if I've got time. If I go and I'm focussed then I buy the same stuff. It's probably why I don't have grapes and you know... I'm just buying my usual things... In a hurry, you know. But I tend to buy more different things when I've got time, you know, to kind of have a look about." (Female, 26-35, Islander, North)

This illustrates how having the space and time to carry out the food shopping gives the consumer the opportunity to look at the produce available, get ideas from the isles and make new purchases. However, even in this larger store this is not always an option for those shopping at peak times when the store is very busy. When this single mother was asked whether she took time to browse and look for new products she describes the difference between her own shopping routine and that of another member of her family.

"No, I probably don't. I find it such a chore. I just grab what I know I need and I don't tend to explore very much...It's usually very busy when I go. I think [sister-in-law] probably has the advantage of... well the way she works, she can go to the

supermarket when it's quieter and she can have a daunder about through the day." (Female, aged 26-35, Islander, North)

Although this is a large store this quote illustrates how the space and ambiance can vary within the same store dependent on day and time of store visit. This participant reported shopping in the large general food store which is one of only two main food stores in the North, which has a population of 20,151 (figures for 2001: General Register Office for Scotland, 2003). Data from Dawson et al (2008) shows the rural affluent, small town deprived and urban affluent sentinels all have a larger population per large store type than the Northern Western Isles indicating that they may have poorer retail options. However, consumers in the Western Isles are restricted to their sentinel whereas those in other sentinels on the mainland have the opportunity to use stores out with their sentinel. The national study identified a range of stores out with the immediate sentinel, named 'buffer stores', which consumers could access in order to improve their food retail store options. There were 15 buffer stores identified within the rural affluent and 25 in both the small town deprived and the urban affluent therefore this would increase the range of stores available to those living in this area. All participants, in this study, living in the North of the islands reported carrying out their main food shopping in either the large or medium sized general store, with 40% of 'main' shops carried out on Friday. As this participant also reported carrying out her 'main' shopping on a Friday, at the large general food store, it is understandable that the store may be busy when she is purchasing her 'main' food shop which restricts her desire to explore the store and source new products.

In contrast, those restricted to shopping in the small stores, where there is limited space and the isles are very close together, regard this extra space and the opportunity to browse is a luxury.

"It's not particularly user friendly the [SCS] you know the way it's, you know you go in and you go round there's not a sort of chance to stand and look at things to make a choice your kind of—we were talking about the deer catching them in a funnel it's a bit like that once you're in there you have to keep moving cos there isn't even any room for people to go past you and there's

frequently boxes and you know because... I mean it's a health and safety nightmare for the staff ...they've got to get it out quickly ... so that the punters can come charging in and grab things so..."
(Female, 50-65, Incomer, South)

This limited space means that small stores lack the floor space to stock a large range of goods and this was frequently mentioned as limiting what was available. This lack of variety, of flavours or options in a particular product category, restricted consumer choice, making the diet repetitive and boring.

"if you go up to Uist and you go to the [chain store] there, you can take a breakfast cereal here there'll be maybe one variety in a smallish pack and if you go to a larger co-op they'll have that variety and perhaps they'll be another two or three flavours in the same range and much bigger packs as well. We get a cereal here called country crisp in strawberry but in Uist they get it in strawberry, raspberry em I think its fruit and nut or fruits of the forest or something there's four anyway.... I came back from Tesco with a load of them, everything except strawberry because we're sick to death with strawberry and it's all you can buy down here."
(Female, 50-65, Incomer, South)

Consuming a wide range of foods and a balanced diet is shown to be beneficial to health and the best way to meet daily nutritional requirements (FSAS, 1994). Although these examples may not seem excessively restrictive, when applied to every food group this becomes more of a problem.

6.4.2 Stock in Store

Flexibility in purchasing decisions in store was required to accommodate the irregular availability of products and this was particularly true in some of the smaller stores with more limited stock. This variation of stock was both praised and criticised. It provided variety in some instances but could make planning difficult as the following quote illustrates.

"That's another thing that disappears is some of the meat you know you get used to it you think that was nice and then you don't see it again so it must be trying them out you know one off things"

Interviewer – What kind of things?

“...they would sell pork loin and then it completely disappeared and I asked and no they didn't get it but now you can get it again, not all the time but I usually buy it when I see it because they're good those long pork loins you know make a nice meal cut it up with mushrooms or what have you... which is quite good in one way because you do get a selection but it's just to know” (Female, aged 66+, Incomer, South)

While this variation in availability is frustrating and requires individuals to be flexible in their product selection it is more of a problem for those with special dietary requirements or where there were no alternatives. This need to adapt and change plans in store was discussed by a number of participants.

In a number of cases planning takes place in store once shoppers know what products are available. This is particularly common in some of the small stores (less than 3000 sq ft selling area) during the main shopping trip. The following quote illustrates how this participant moves around the store, going first to the meat section to see what is available and then working back to the vegetables once she has decided what meals can be made using the meat available.

“The other thing living in Barra you can't plan your meals, you can't plan a meal list the ingredients go to the shop and hope to find them. It's different shopping when you don't know what's going to be there and it may not be that you can't find something special for a particular sauce or for a particular dish, it's maybe that you go in and there's no eggs or there's no sugar or no flour in any shop it can be really restricted like that. So mostly I go to the co-op...I go in to the co-op and have a look around before you go to the vegetables have a look and see what meats they've got, we all eat meat in the house and then work backwards to what you're going to do with it cos I've done the 27 years of one hundred interesting things to do with mince (laughs) there's not a great range really” (Female, aged 50-65, Incomer, South)

In this way product choices are shaped by what is available in store. When a certain product, which participants have planned to buy, is not available there may be an alternative. However, it is unlikely there will be a choice of alternative products and

shopping can be more about taking what is available than making choices. The quote above alludes to the fact it can be the same product which is stocked all the time, which can become monotonous continually inventing different ways to cook and prepare a particular type of product i.e. mince and can be arduous.

6.4.3 Offers

The way in which participants reacted to 'special offers' in store varied depending on household budgets and the nature of the item on offer. Those on a more restricted budget were most likely to actively seek and purchase fresh items such as fruit and vegetables which were close to their sell by dates and reduced in price. Some made meal and snack decisions in store based on these reduced items while others prepared and cooked these goods to store and use at a later date.

When fresh meat and fish were on offer this also affected the way some consumers shopped and what they chose. Several participants commented on the expense of purchasing fresh salmon fillets and said they would only purchase them when they were on offer e.g. buy one get one half price. These offers saved money and allowed participants to purchase more expensive items which they could not normally afford to pay full price for.

Participants were also attracted by special offers on dried goods and treats e.g. breakfast cereal/ crisps/ biscuits. Non food items such as washing powder were less likely to influence purchasing decisions for some participants as they preferred to stick to their usual brands. Participants would make use of items on offer if they already purchased the item however, most said offers would not encourage them to buy items they do not usually purchase. Participants saw these offers as an opportunity to stock up on basic items which can be stored or trade up to better quality products.

*"there's cheese on offer just now in the co-op buy one get one free
I got a stack of that and then squeeze space in the freezer to fit it
in ~I bought eight packets of that because its BOGOF, I know its*

4 pound a pack but its good quality cheese its not the cheap horrible tasteless stuff and it works out, yeh if its BOGOF then your still saving.” (Female, aged 26-35, Islander, South)

Participants felt it was important to utilise these offers to save money on food shopping, as the opportunities to do so were limited in the Western Isles. While consumers on the mainland can use discounter stores, purchase large pack sizes and a range of own brand products in order to reduce the overall cost of the household food shopping, small and medium size stores in the western isles do not have the storage space to stock large pack sizes and the range and quality of own brand products are limited.

Given the demand for these offers stores often ran out of the products on offer and participants often felt that they missed out on possible savings. They found this frustrating and some felt certain stores could plan and organise these better in terms of ordering an adequate amount of stock when popular offers were on and having the offers displayed more accurately on the shelves. There were also reports of items on offer being charged at normal price at the till, where the relevant information had not been registered. This problem was reported in two of the 60 stores throughout the islands, one of which was the main store for South Uist. The following quote is from a conversation between a mother and daughter regarding their experiences in the same store

“And sometimes when the special offers are up on the thing it’s not going through the till as the special offer you pay full price” (Female, aged 16-25, Islander, South[daughter])

“Something last week actually I got two things and I can’t remember now what it was ... whatever it was and I got the two and it was when I came home or the next day and I was clearing out my purse and I noticed I had been charged full price for both things but it was still on offer ...I said it before, this is going back a long time I said it and they said ‘well we’re too busy we haven’t had time to put all the offers through the till yet’ I said well if we’re entitled to them we should be getting them and if it says on there from such and such a date to the next date that we’re meant to be getting these we should be getting them. She said ‘well we’re short staffed an we didn’t have time to put them through the

computer' and I said 'well you should have a list at the till and see'." (Female, aged 36-49, Islander, South [mother])

Those on a limited budget shopped on a daily basis and used the reduced items section regularly as a way to manage their limited budget. Meals and snacks could be planned around what was available in these reduced sections as demonstrated in the quote below.

Interviewer – Do you make large batches and freeze things then?

"No I just, like if I've got something like yesterday all the plums were reduced to 10 pence and I bought loads of plums and I've made plum crumble and plum jam so that's the kind of..., so if I go in today and the potatoes are reduced I might just make and freeze chips you know like peel them and... or I might not. I don't plan my shopping ...I go in every day, I go in every day for fresh milk things like that and my mother in law always has a little list every day so" (Female, aged 50-65, Incomer, South)

6.4.4 Habit/ Traditional Meals

Much of the product selection in the store was centred around meal composition and purchasing basic food items such as milk and bread. Participants talked about a repertoire of meals and their purchases reflected what was available in store and showed very little variation. Some concluded they were 'creatures of habit' or lazy in their choices and did not always explore all the options available to them in store. For others, a lack of knowledge, cooking skills, economic restrictions or family taste preferences restricts the choices they make in store.

"Still get the same stuff, as I say sometimes there is no variety when you go there [SCS], you look for a wee bit of a change but you stare at the same stuff every time you go there you just stare at the same stuff"

Interviewer – What would you like for a bit of variety?

"Well try anything else that's going eh maybe a Chinese or an Indian meal if they had any of these"

Interviewer – Is that the ones that are already made up?

“Yes, uh huh”

Interviewer – Have you tried them before?

“No I haven’t”

Interviewer – Do they have them?

“I think they do now, I think they have started to take them in but I haven’t tried them yet so I’ll have to and of course again anything new for [brother] he won’t like it” (Female, aged 50-65, Islander, South)

Initially this participant regarded the poor availability and lack of choice in store as the reason for not trying different foods, but concluded that it was her families’ taste preferences which inhibit her choice.

6.4.5 Purchase Limited Items in Stores

Some of those making use of alternative food networks to obtain a large amount of their households’ food requirements reported purchasing relatively little in stores. They used weekly shopping trips to supplement the products obtained by other means. Products bought in store tended to be those which could not be obtained from alternative networks such as milk, cheese and pasta. In store choices were again focused on meal composition and ensuring that basic items and fresh products were purchased.

Interviewer – So what do you buy from the shops?

“Here as little as possible (laughs) on em I suppose my fruit we eat a lot of fruit so it’s getting fruit here but the choice tends to be apples and oranges and sometimes bananas... so I suppose it’s really my tinned stuff and just everyday, cheese I think is the biggest thing I buy here eh if I’m away I buy a box of butter and I freeze it, my flour is usually bought in big bags usually in Uist, I buy 3 kg bags of pasta and I buy a slab of tinned tomatoes and I make my own bread so I don’t buy bread either and when I’m away I will get a large quantity of bread flour, all different types of bread flour and different seeds and things like that for making

my own bread so I don't buy bread ... still seem to spend a lot of money in the co-op"

Interviewer – So do you know what you are buying from the co-op? How often would you go to the shops?

"Em two or three times a week but it tends to be, today it was fruit I got apples and oranges, the bananas were on their way out so I didn't buy them eh cheese smoked sausage I tend to buy if I'm buying any sausage, crisps the usual and things like your hankies and toilet rolls stuff like that, I'm not very good at remembering to buy big in bulk when I'm away em crisps, chocolate biscuits those kind of things that are treats and juice eh fresh orange juice and things like that I tend to get" (Female, aged 36-49, Incomer, South)

For this Incomer, who produces much of her households' meat and vegetable requirements on the family croft and bulk buys items such as flour, sugar, tinned tomatoes on other islands and the mainland, the local stores are used to maintain the store cupboard basics, fresh fruit and general household goods such as toilet roll and cleaning products. This participant, along with a few others, felt they did not purchase a lot from conventional stores in the area but relied more heavily on a variety of alternative networks available to them. Local stores are used to complement their use of alternative networks. For the majority in this study the converse is true.

6.5 After Shopping in Store

6.5.1 Trip home/ Final Mile

Those who had to travel long distances, in excess of 25 km, to the store and those who relied on public transport found frozen products problematic requiring a freezer bag or cool box to get these products home. Freezer bags were not available for purchase in the island stores therefore one would have to be taken from home for the shopping trip.

"Sometimes you go into the freezer [SCS] and all there is, is frozen peas or brussel sprouts and that's it. They're so limited in

space that literally they have the chips, the brussel sprouts, the peas and there's usually wedges and something else there isn't a lot of room for very much else. That's another thing you'll notice going to Uist is the choice of frozen stuff but bringing it back is really hard cos you're travelling, you've got to keep it frozen and 9 times out of 10 you don't have the freezer bag and you know it's going to be defrosted by the time you get home so..." (Female, aged 36-49, Incomer, South)

However, chilled goods e.g. butter/ meat, were less problematic to transport and purchased by some on other islands and even from the mainland. It was possible to purchase these chilled goods providing provision was made for their storage during transportation, however, it was more difficult to transport frozen goods as they would defrost during the long journey and wasted.

"we take it [meat] home, we buy big slabs, take it home cut it into – it's a hell of a job because I have to do it when we come off the ferry you know but we have cool boxes if he's got the truck he's got cool box where it's stored with ice packs you know and take it home and I cut it up and wrap it up in foil and put it in the freezer outside same with the chicken, the bacon, the mince the, everything. It's a lot of work for me to do but it's worth it, it's worth it because the price you pay for meat locally... I've been once to the local butcher and I bought lamb and I would never go back there again" (Female, aged 36-49, Islander, South)

Frozen and chilled products were not really suitable for those travelling by public transport from the mainland to reach ferries as the increased travel time, limited storage space or carrying capacity. For those travelling back to the islands by car storage space was also at a premium particularly for those with children where space was more limited. This required some skill in the packing of the car and some families had purchased a roof box to enable them to bring more back from the mainland.

6.6 Storage in the home

Those who can bulk buy, from the mainland or local suppliers, need adequate storage in the home. Storage solutions, for fresh, preserved and frozen products included

utilising cupboards throughout the house and the majority of households had multiple freezers, located both in the home and in outbuildings such as sheds and garages.

Many participants had multiple freezers in order to stock up between shopping trips allowing them to store large amounts of produce, plan their shopping, reduce the number of trips to stores as well as save money by buying in bulk. A few participants reported being short of freezer space having had their additional freezer breakdown and a number were saving up to purchase another freezer. Some participants had down sized their freezer when children left home thinking they would no longer need the additional storage but in retrospect have changed their opinion.

These participants reported having to turn down food gifts, such as large amounts of meat and fish which they can not eat straight away, due to limited storage and were unable to bulk cook to the same extent they had in the past.

“if your doing baking then you have a whole day where you do a whole pile of baking and then what you know isn’t going to get eaten goes in the freezer. I would really be struggling without a freezer – I don’t think I could cope without a freezer. There are a lot of things I could live without but a freezer, life would be really, really difficult here without a freezer cos stuff – everything just goes into the freezer and keeps no bother at all. It does make a big difference and if there’s something in the shops that’s only there once in a blue moon then you can put it in the freezer – there was venison pate at Christmas time and it was a big dish of venison pate so that wasn’t going to get eaten so it got sliced up and put in the freezer, you know you can buy the special things if you’ve got the freezer room to put it in at Christmas time and it’ll last longer.” (Female, aged 36-49, Incomer, South)

However, some participants who lived on their own did not have the luxury of this freezer space having only one freezer drawer in their fridge or no freezer at all. Consequently, they had to shop more frequently and had to purchase and consume fresh food and this limited the food choices available to them. For one participant living alone without a freezer, this required the same meal to be eaten on consequent

days to minimise food wastage, indeed he purchased frozen foods such as chips but stored them in the fridge and ate them for a few days in a row.

6.6.1 Preserving Vegetables

In more remote areas in the North, participants tended to shop once a fortnight or once a month. For this reason fresh vegetables were prepared and frozen for use at a later date in order to extend the length of time they could be used (2-4 weeks) and to reduce wastage. This practice of freezing fresh vegetables was also carried out by some participants in the South. Those in the south who froze vegetables did so because the quality of vegetables available from the stores was poor and unless used one or two days after purchase would waste. Items bought often began to waste soon after purchase so participants' pre prepared and froze what they couldn't use in order to reduce waste. It was thought, the long distances involved and length of time produce spent in transportation to stores in the south contributed to this.

Storing fresh vegetables in this way appeared to be preferable to purchasing frozen produce. This may be due to habit or the limited range of frozen vegetables available. Fresh vegetables are preferred over frozen on the majority of occasions, with the exception of frozen peas, but most have some frozen vegetables in the freezer in case they run out or there is nothing available in the stores. Part preparing vegetables and freezing them was also considered another way in which to be organised having them ready to use when preparing meals at a later date.

"What I sometimes tend to do, if I do overbuy carrots and turnip and I think "oh that's not going to last the week", I'll cut it up and I'll freeze it myself."

Interviewer - Does that work OK?

"Yes, because more often than not you're just putting them into soups or putting them into mince or putting into stew or whatever, do you know what I mean – you're just mixing them in. But, yes, so I do tend to sometimes buy, just I think as well it's just to have in. You know, you've got the frozen veg in, so if you do run out you've got it there. Again, it's just that careful... if I was going

up every single week I probably wouldn't get the frozen. You know, because I'd just be buying fresh all the time. But because I tend to go every fortnight, and you find that with an awful lot of people around here that more often than not they will buy frozen. Just for the simple fact that more often than not they're not going up to Stornoway regularly enough for... or they're not going for fresh veg, so they'll always have frozen in, you know." (Female, aged 36-49, Islander, North)

6.7 Cooking skills

Bulk cooking or cooking and preparing meals in advance is regarded as one way in which to make best use of time and ingredients when they are available. With limited access to take away facilities or a good range and quality of ready meals in stores, this is common procedure in some of the more remote communities. Pre preparing foods is also used as a way to reduce food costs, store foods bought fresh from the mainland, produced on their land or items available in store less often. In this way produce can be prepared in advance and stored for longer periods of time than would be possible in a raw form.

"Yes, if there was more vegetables yes we would definitely eat more, definitely even if the family were not keen on eating it I would put it into soups and they would eat more vegetable soups and things. I mean when I go away I will bring back bean sprouts and I'll have day and I'll make spring rolls, make a whole pile of spring rolls, buy the pastry when I'm away and the stuff I need for it like the bean sprouts and make a whole pile of them and they go in the freezer, things like that I'll do which I suppose if I had access to that stuff all the time I would probably have access to a lot of other things like the ready made meals so I probably wouldn't make them but I know that if we want spring rolls then they have to be home made so you do things like that" (Female, aged 36-49, Incomer, South)

Although many participants reported being proficient in cooking for their household and being creative with the produce available some were not so confident and this influenced their food choices. For example new vegetables may be available in store such as sweet potatoes and fennel but some participants did not have the knowledge of how to prepare and cook these items or lacked the confidence to experiment with

new produce. Those who were not confident cooks discussed how they had tried different vegetables at friends or a restaurant and enjoyed them but would not attempt to recreate these recipes at home, whereas those who were more confident had done so.

Learning to cook by watching parents or other family members was common while teaching themselves as a result of necessity through trial and error was also discussed. One participant said she had not considered cooking until she was about to get married:

Interviewer - Where did you learn to cook?

"My mum. I had no interest in cooking up until about four months before I got married and then suddenly realised that my mum's not going to be here to do my cooking. So, I just watched what she was doing and I've just picked it up, just carried it on myself."

Interviewer - Do you experiment much when you're cooking, or..?

"No. I do the basics and that's it."

Interviewer - What's that?

"Like, I'll do mince and potatoes, shepherd's pie, stewed sausages, macaroni, lasagne. I can do all that. I don't mind doing that. I do the odd sausage casserole now and again, so he doesn't do too badly out of me!" (Female, aged 26-35, Islander, South)

This young woman was relatively confident cooking these regular meals but did not experiment with her cooking or use different or unusual ingredients. She chose not to experiment with cooking new dishes but stuck to those she had learnt to cook by watching her mother. This was the case with several participants who said they were reluctant to experiment with food and were apprehensive about cooking new meals or certain products.

Fish was one product some participants were not confident about cooking, despite it being considered 'a traditional feed' in some of the islands. Even some of the

islanders who were used to fish being caught regularly by their husbands or sons, were not confident about cooking different fish or cooking it in a different way or with a sauce. This obviously has a knock on effect for consumption and perhaps the variety in the diet. It may also affect the knowledge and cooking skills passed on by these participants to their family as this was found to be the most common way participants learned to prepare and cook food.

6.8 Summary

A variety of different factors affect participants shopping behaviour. These included both external such as delivery times/ shop opening hours and internal factors such as household composition, storage facilities and cooking skills. The extent to which these factors affect food choices and consumption is dependent on the time available for food procurement and food preparation and how confident and skilled individuals are in these domestic chores.

ADAPTING SHOPPING BEHAVIOUR

6.9 Utilizing Produce Available & Managing Inconsistent Supply

Fresh produce which was reduced or on special offer in store was often bought and bulk cooked or part prepared and stored for use at a later date. This practice was carried out both to reduce costs and to increase the choice available to them for longer periods of time. In particular, those on a limited budget chose fresh items in the reduced section as this allowed them to increase the amount or variety of produce they could purchase. Some purchases were determined by what was on offer and meals were constructed around this or items on offer used to prepare treats for the family.

Interviewer – So do you find you eat better now you're on a more restricted budget?

"I have actually yes, yes I think the more money you have the more you go for the rubbish, cakes and crisps, treats and sweets and things, the kids still get a packet of crisps but now it's a packet a day that's their treat if they get munchies or they get fruit now, fruit's expensive but em I keep it in the fridge and that keeps it longer and I do tend to go for the stuff that's reduced, that's the first place I go when I come out of college – the reduced area cos usually in the co-op now they have fruit and vegetables reduced and I can budget with that"

Interviewer – And is there quite a good selection

"It is quite good there and I'm picking up grapes for just over a pound for a punnet and apples are reduced to eighty something pence you know"

Interviewer – And they often have fruit and vegetables reduced?

"Yeh every day really" (Female, aged 36-49, Incomer, North)

Those growing their own vegetables often cooked batches of soup or part prepared vegetables and froze these for later use. Although many felt the taste or texture of fresh vegetables was altered during this process and didn't like the result.

Staples such as bread and milk are often bought fresh several times throughout the week. However, when participants were unable to access stores at the most suitable times or when ferries were postponed these items were often sold out. To ensure these basic items were available home baking was popular with items such as scones and cakes traditionally made and offered to visitors to the home. Home baking was still evident in many households as well as baking bread in order to have fresh bread available when required. Bread was made either by hand and oven baked or in a bread maker and was more common in the South where store deliveries were less frequent. Participants kept the ingredients needed in the home or had a packet mix so they could make a loaf if need be either on a regular basis or when not available in stores.

"I make my own bread so I don't buy bread either and when I'm away I will get a large quantity of bread flour, all different types of bread flour and different seeds and things like that for making my own bread so I don't buy bread that all started because before

we moved here when we came on holiday actually getting bread on a regular basis was just a nightmare and sometimes it was off or it was on it's way and before we moved here I said I wanted a bread maker and I was going to make my own bread." (Female, aged 36-49, Incomer, South)

Ferries were regularly postponed due to bad weather but most participants were able to cope with the limited choice in store and talked about being able to "make a meal out of anything" and being able to adapt and change meal plans according to food availability in store. This was something which participants had adapted to over the years but for those with limited confidence in their cooking ability or restricted by long working hours this was difficult and they sometimes resorted to quick, easy meals such as burger and chips. However, those who were more confident cooks and comfortable experimenting with food enjoyed being inventive.

Interviewer - So what kinds of things do you keep in the house?

"Oh usual, rice, beans, pastas, tins of tomatoes, basic kind of things you can rustle up a pasta sauce or something like that. Things in the freezer like peas and beans and broad beans and sometimes stuff from the garden. Peppers and things I can freeze, chillis, ginger, all these kind of things, I just keep them frozen and use them in the winter time when I'm not in and out the town. I don't go to the town that often... I'm very good at magic-ing up meals out of nothing. I don't eat sort of normal roast beef and whatever, whatever, you know. I make all sorts of interesting things. As long as you've got beans and tins of tomatoes and chillies and things you can... and bits of salami or something, you can come up with anything." (Female, aged 50-65, Incomer, North)

6.10 Local Produce

Some consumers sourced local produce from a variety of places including stores, producers' markets or direct from the producer. Farmers markets operated in Stornoway every Saturday from May to December (9 am – 1 pm), once a month in Benbecula (Lionacleit School) and seasonally in Barra once a month. There are also less frequent produce sales and 'sales of work' which are less formal markets and community events selling fish and other items such as vegetables and home baking.

Those with access to this produce have a more positive perception of food availability in Eilean Siar.

"I think that's the fabulous thing about living in an environment like this, is that you have access to the best quality food. You have fabulous butchers that have really fresh meat, you have venison that's coming straight off the hills, you have lambs that are fresh and local, you have fish that is just caught by all the fishermen and I think that's part of the beauty of living somewhere like this, is that you have access to such beautiful food." (Female, aged 26-35, Islander, North)

However, others living on the islands reported poor availability of local produce due to limited supplies or lack of knowledge about where or when to access it. There was no uniform supply of items such as beef which was only available in season at certain times of the year. For those who did not produce their own or have close family or friends doing so they often forgot when this was available and missed out on ordering.

This lack of knowledge of local food availability was not limited to incomers but distributed throughout the islands. Those living in the South, with only small retail stores and less frequent deliveries to stores tended to source more local food as did some living the more remote areas of the Northern isles. This suggests that those in good health with poorer access to conventional retail provision are more likely to find alternative supply networks and produce their own food.

As discussed previously, some consumers have difficulties accessing fresh fish with participants having similar problems to accessing other local produce. However, where these products are available perceptions of availability are positive as consumers consider the quality as excellent and appreciate this option as one of the benefits to living in an area where this type of produce is available.

6.11 Mainland Shopping

Most participants who visited the mainland chose to purchase some food products although none of the participants travelled to the mainland purely for food shopping. Mainland shopping trips were usually linked to holidays or working trips and the importance of these shopping trips to the overall household food supply varied between households. Some participants living in the south purchased a large amount of the household food during these trips spending between 300 and 900 pounds in a single trip. One participant told of the regular trips to a mainland wholesaler both while on holiday and during her partners work trips, as described in the following quote this contributed large amounts of food for the household

“Yes and when we go on holiday, every time we get a break we’re away, we have a big car and we stock up we fill the car with everything – juice, everything so we hardly do any shopping locally because it’s rubbish!”

Interviewer – So do you have bread left from Macro?

“Yes, but we’ve run out now because the last time we were there we had the car, in fact we bought the bread last time we were there Warburton’s bread for 10p a loaf and I think we bought about 20 of them there all gone now, cos last time we were away, end of July yeh – I think so. Because you can’t get cheap bread here if it’s reduced, it’s reduced to something like 74 pence from 99, you know you can’t get really cheap bread but you want it to be good quality as well but for the brown bread I think it’s £1.09 for the co-op bread the nice brown one I buy I think it’s £1.09 but even if they reduce it you know if it’s nearly out of date they don’t take much off”

Interviewer – Do you buy tins and things in Macro as well?

“Yes, uh-huh, beans, spaghetti, tomatoes- chopped tomatoes you know, Sweetcorn ... dog food, we buy dog food because it’s like twelve pounds, when it’s on a special it’s about twelve pounds something a bag, in the local vets in Benbecula it’s twenty six pounds a bag for a 26kg bag so we store it up in the shed, so in fact there’s only about three bags left so I mean that’s a huge saving, a huge saving...But yes when he had the truck [during work trip], you know the big, big boxes of Bold you know the washing powder, the big Lenor and the big Flash and the big

bleach and everything – you name it! He would spend hours in there, have about three of four trolleys”

Interviewer – You must have to spend an awful lot of money at one time though?

“Yes, yes it’ll come to maybe £800 pound, but you’re saving, you’re saving all the time because that big packet of Bold does me maybe a year” (Female, aged 36-49, Islander, South)

This participant chose to shop in this way as she felt it was more economical and provided much better products than were available locally to her. Although this quote discussed a lot of non food items she also purchased large volumes of other food items such as meat, cheese and butter. For others trips were made to specialist suppliers such as Highland Whole Foods where storable foods e.g. nuts, grains and dried goods were purchased in large amounts (approx. £900). During these shopping trips a large amount of money was spent and this food often sustained the demands of the house, for these items, for up to approximately 12 months.

However, others only shopped on the mainland for ‘treats’ or goods not available locally. These included certain types of chocolate or biscuits, high quality fruit and vegetables, speciality breads and a range of baby foods. Products bought on the islands but which were only available in small pack or jars in island stores were purchased in larger pack sizes as this was perceived as better value for money.

As with some of the alternative food networks these mainland-shopping trips increase the choice available to the consumer and are more economical. Although some of the products bought such as fruit and vegetables are available locally they are perceived as poorer quality. Small pack sizes often mean the price per weight is more expensive than if bought in larger packs. Some participants only bought items described as ‘treats’ on the mainland which are items not available in stores on the islands such as luxury chocolates, Marks and Spencer’s ready meals and biscuits. These are not an essential part of the diet but the option to purchase these goods made the diet more interesting and trips the mainland more exciting. Using these

trips to increase the choice of food available makes participants feel less restricted by the limited choice available locally.

6.12 Stocking Up

Due to the irregular supply of produce in store most participants reported keeping a well-stocked store cupboard. Cupboard surveys (chapter 8) showed items stored consisted primarily of dried and tinned goods with over 80% of participants having items such as porridge oats, dried spaghetti, white rice and baked beans in their homes at time of interview. Many participants also had more than one freezer to store meat, fish and other items such as bread.

“Now the freezer is the main part of your furniture because winter time and even through summer time you’ve got to keep a reasonable supply of your basics you know your bread, butter your every day things, you buy that in bulk sort of thing so probably between the two houses if your only going once a fortnight you probably buy 10 loaves and just put them in the freezer use them as you need, now fruit doesn’t keep in the freezer and vegetables we’ve tried when we’ve had surplus of our own veg maybe some years you’ll have more cabbage than you can cope with and the cabbage begins to split and this sort of thing the only thing that keeps reasonably well in the freezer is sprouts, we’ve tried freezing them raw, we’ve tried blanching them every way but they never taste the same ...” (Male, aged 50-65, Islander, North)

The practice of storing food was most important for those living in the South and some of the more remote areas in the North. This was necessary to in order ensure enough food was available in the home to sustain the household between deliveries or less frequent shopping trips i.e. fortnightly.

Those who bulk buy on the mainland need to be able to store the food and some used outbuildings and other cupboards in the house. Home-grown vegetables were also stored in the home in a variety of innovative ways for example one participant stored carrots in sand boxes in the home and dried out onions in the kitchen. Growing and

storing food in such a way means it is an integral part of everyday life and always at the forefront of participants' minds.

6.13 Summary

There appear to be difficulties in obtaining certain foods i.e. fresh fruit and vegetables of acceptable quality and freshness at certain times, most common during the winter months, but participants had ways of adapting to this situation and none reported being unable to provide food for the household in some form. The island location makes food supply uncertain due to weather conditions and the small store sizes can limit the range of products available however, participants adapt to the situation and were skilled in dealing with the challenges they faced, which many participants felt was part of island life.

USING LOCAL RETAILERS

6.14 Introduction

Many participants had good relationships with some of the smaller chain and independent stores on the islands and most retailers adapted to supply and demand issues in order to improve the service they provide to the community. Some of these smaller stores, in more rural areas, worked hard to improve availability, and attract and retain customers. These services included pre-ordering meat, reserving milk and ordering special requests for particular products; services not normally available in the larger chain stores on the islands. The National survey (Dawson et al, 2008) found large stores stocked a higher percentage of the healthy eating indicator shopping basket indicating a wide range of products are carried in stock at any time, therefore such services are unlikely to be required in areas where these stores are available.

6.15 Special Orders

Participants using one of the small independent stores said its meat was supplied from a butcher on the mainland and customers could place a weekly order, this was seen as a 'win-win' situation. The retailer benefited as they could get a more accurate idea of how much meat needed ordered hence reducing unnecessary outlay or losses due to excess wastage and customers were guaranteed a regular supply of good quality meat. This also enabled participants to order specific cuts of meat as required, it was more expensive but participants felt the extra expense was worthwhile given the choice and better quality product available compared to purchasing from the larger supermarkets.

"Em we get very good quality meat though here because you can either buy from local producers or you can, there's a butcher from the mainland that supplies our local shop which is very good and again they get like just the regular things in every week like mince an you know... maybe braising steak or something but if you want a special cut of something then they'll order that for you"

Interviewer – So where do you buy your meat?

"...in the local shop here but that's because it comes from...it comes, I think it comes from Dingwall actually from a butcher there but it's very good, very good quality but it's probably quite expensive but you don't have the choice so..."

Interviewer – Do you think it's expensive compared to the co-op or...?

"Well it is more expensive but it is far better quality than the pre packaged stuff you get in the co-op so you just have to, you make that choice you either... I would rather spend a wee bit more knowing that I am getting something decent than..." (Female, aged 36-49, Incomer, South)

This service was provided in one of the stores in the south where there are only two butchers, one in Benbecula and the other in South Uist. These specialist stores are quite long distances for some living in certain areas of the south such as areas of North Uist and Berneray and can be up to an hour drive time away. These stores can

therefore be difficult to reach due to time constraints and the option to purchase butcher meat from the local store increases the choice available.

Some of the small independent retailers also offered a reservation system for milk, ensuring it was available when customers wanted to collect it. This was particularly attractive during periods of high demand such as during the winter months when deliveries could be postponed or cancelled due bad weather or in the summer when tourists visit the islands.

"He gets milk in Monday Wednesday Friday but you pay 50p more here but I order it I always get a big carton on a Friday I always order it from him cos again you feel you need to support him"

Interviewer – Why do you order it?

"Some times in the summer it will just go and he won't have it so I've just always placed and order with him and then even if it goes even if I don't get in there til Saturday he keeps it for me, so its just to know that at least I've got milk but I think that the shop here is a bit dearer but at least your not spending it on the fuel"
(Female, aged 66+, Islander, South)

Although this service is available not everyone uses it as purchasing from these stores can be more expensive than the larger chain stores. Participants felt you had to be a loyal customer in order to use this service and felt they would have to purchase a certain amount from the store on a weekly basis in order to request the service. A number did not want to be to make this commitment.

Requests for a range of specific items such as chicken, special cheeses, Soya milk and yoghurts were also made with stores. Some participants ordered these items on a regular basis i.e. once a month whereas others requested 'one off' items. The variety and frequency of these requests and the accuracy of the product received varied dependent on the store used.

"The wee shop is very, very good, it's...Yes. It's lovely and clean and they'll get things for you. Like, we like free range chicken and so she'll get it for me, you know. So anything that you ask or

request, she'll get it. So she's very good at...But the manageress of the shop gets most things that you want. If you say "I'm looking for this", she'll get it. But we buy ten[pieces] – I think the minimum you can buy is ten...Well, we do for the chicken, but not for herbs and things."

Interviewer - So, how many chickens do you have to buy at a time?

"Pieces, you know, we buy about eight pieces, a little packet. They go in the freezer and they last a fortnight or so and then we ask for them again." (Male, aged 66+, Incomer, South)

Illustrated in the quote above, this organic chicken, ordered on a regular basis by an elderly couple from their local community shop was successful in both the product received and the quantity received. They attributed this success to the store manageress who they regarded as 'very good' in terms of store management, the flexible ordering service she offered and the confidence she instilled in the products and services in store.

However, in another store, individuals' requests had been less successful. A number of participants reported having to order a whole case of the item, and where products had a short shelf life they struggled to finish them within date. In other examples the wrong product arrived but they still had to purchase the whole case as they had requested it.

"Em I have asked for things in the co-op and they do sometimes come but there sometimes not quite what you asked for. The last thing I asked for was sweetened Soya milk because my doctor suggested I might try it...they did have sweetened Soya milk in the co-op once and then it was all sold out and then they stocked the unsweetened after that with is really a bit hard to ...It's quite hard, I tried sweetening it with apple juice myself but it didn't work em so I asked the manager if he could go back to getting the sweetened type as well and they did get some but they didn't get the same one as before they went and got the organic one which is half as much again in price but it is sweetened and I'd said I would buy a whole crate so I had to buy 12 litres of ...organic sweetened yes so... No, it wasn't what I asked for but I'd asked for it so I had to have it so you're very careful what you ask for." (Female, aged 50-65, Incomer, South)

Although this service was appreciated, a number of individuals said they wouldn't do it again for reasons such as the ones given above. In terms of influencing the stock carried within the store participants thought there was 'no point asking' as the limited space in store meant the store manager would not be able to introduce new lines of products. In these small communities participants were wary of offending shopkeepers as they were often reliant on the store as their main source of food groceries.

"I think people are beginning to ask for things a bit more and be braver about asking, you could be a little nervous about upsetting the local grocery store because you might not get anything, well not that you wouldn't get anything but they could just sort of ignore so you try to do it nicely and not be critical" (Female, aged 66+, Incomer, South)

6.16 Alternative Distribution

Difficulties in accessing food retail stores at the times that provide optimum choice, after deliveries arrive in store, posed difficulties for some. A few of the retailers offered delivery services while mobile grocers and fishmongers made certain fresh products i.e. fish, bread more accessible for those using these services.

Accessing fresh fish was a particular problem for some on the islands due to the fresh nature of the product and the limited days and times which it was available from specialist suppliers. There were mobile fish vans in the North and South with only one fishmonger in the North, located in Stornoway. Due to fishing days and the fresh nature of the product a good range of stock was only available on certain days and at certain times of the day. There were difficulties accessing the store at these times due to large travelling distances, transport restrictions and other commitments such as work. Some participants overcame these issues by phoning in an order to the fishmongers in the morning for collection later in the day to ensure they were able to purchase the products they wanted. This service did not appear to be publicised and few participants talked about doing this or of its existence as an option. Another

participant explained another service offered by the fishmonger where by the fish was ordered by phone and delivered using public transport.

“But our fish monger in Stornoway is very, very good. I mean you’ve just got to phone him up and he’ll send it on the bus....Yes, you know, there’s some days you need fish and..., you pay carriage on the bus. Yes, I know that. That’s naturally... Aye, that’s it. Well you pay anything that comes on the bus like that, parcels, you pay a little for it anyway... the bus comes to the car-park where the tourist office is...we meet it there. Someone goes up and meets it there... Yes they take it to the bus station in Stornoway, the fish monger, and we know what bus it’s on.”
(Female, aged 66+, Islander, South)

The option to phone in a fish order for collection or delivery by bus could be useful to many participants who were less flexible in the times they could shop or those with transport difficulties. However, few participants used these services and had no knowledge of its availability.

A similar lack of knowledge or information about where and when mobile fish vans could be accessed was evident. Having these services available was important in this area, as there are few other suitable opportunities to purchase fresh fish, therefore the lack of knowledge about these services was restrictive and further limited access to fresh fish. The national retail survey showed haddock to be available in only 50% of stores on the islands and salmon fillets only available in 21.4% of stores (Dawson et al, 2008). Mobile fish vans operated in some areas however, several participants reported that these had recently ceased to trade in their area. These participants reported a knock on effect on their households’ fish consumption as they usually purchased from the van on a weekly basis.

Although the fishmongers in Stornoway was within travelling distance for all in the Northern Isles, it was often reported as being too far away or a more expensive option, in terms of product compared to chicken or mince or supplier with some finding the mobile vans less expensive. This dissuaded some participants from making the extra effort in order purchase fresh fish regularly.

6.17 Retailer Initiative

Although small stores were generally regarded as an important feature of the food retail structure participants felt some of these stores types were rather complacent in the service they provided due to their ‘captive market’. However, certain small stores were praised for the service they provided. In one area the local shopkeeper was praised for the effort made to ensure a good supply of fresh fruit and vegetables were available throughout the week. One participant explained how this shopkeeper travelled a 72 mile round trip six times per week to the nearest large supermarket in order to replenish his stock. This service was greatly appreciated by this local, giving him piece of mind knowing that fresh fruit and vegetables will be available

“But it’s still a good service. I think, specifically, [store owner] shop, it’s good. It’s good veg. It’s a daily run. If you go in there first thing in the morning it’s empty. You’ve got to wait until he comes back from town, and it’s just kind of, you’re safe in the knowledge that it is, its fresh stuff he’s bringing back. It’s as simple as that...So, it’s a good service I think.” (Male, aged 26-35, Islander, South)

6.18 Summary

Alternative food networks and some of the additional services retailers provide give participants a sense of freedom and choice, reducing the reliance on the local retail structure and sometimes irregular supply of stock in stores. Use of these initiatives and alternatives tended to be more prominent in the South and more remote areas of the North. Although those using these alternatives tended to live in some of the more remote areas, the profile of these people varied and was not restricted to any particular age group or those native to the islands. These alternatives were used to provide a more constant supply of fresh produce and support local producers, the local economy and traditional lifestyles.

ALTERNATIVE FOOD NETWORKS

6.19 Introduction

Opportunities to obtain or purchase food items extend beyond the conventional retail network as consumers access alternative food networks (AFN's) such as local produce sales, buying direct from producers, producing/ growing own, bartering, sharing/ gifting food, hunting/ gathering and fishing locally. Access to these alternative networks varied between islands, communities and households depending on location, land to utilise for food production or knowledge of availability, personal ability and skills.

6.20 Local Producers Sales

Participants in various areas of Eilean Siar reported the existence of local producers sales, selling meat, fish, shellfish, potatoes, eggs and to a lesser extent vegetables, and these took place at regular intervals during certain times of the year. Use of these local sales varied amongst participants and, although some were not aware of their existence, many used these sales to purchase and consume locally produced food as the following quote illustrates

"I try and eat locally produced things as often as I can rather than buy in from outside, I get my eggs from [local crofter], I tend to buy meat from the local producers sale ... food shopping here is expensive if you buy in the shops and it is more expensive to buy things from the local producers sale but you know exactly the quality of what you are getting and it's fresh and I think that's quite important to try and be a bit self sufficient" (Female, aged 50-65, Incomer, South)

Perceptions of local producers' sales varied between areas and individuals dependant on the choice available at these sales and the importance participants placed on product quality, supporting local producers and a desire to purchase locally produced produce. Producers' sales appeared to be more popular in areas of the South where

only small stores and no specialist stores were available. Participants in these areas had a poorer perception of retail provision and this additional facility increased the options and choices available. Local produce was regarded as excellent quality and many participants expressed a desire for greater availability of local produce.

“Well I’d like to support, you know... there’s not that many producers here though, because you don’t see anything in Harris anyway. But I would, I would if there were. There’s things like, in Uist there’s salmon, smoked salmon, and the local shops supply that sort of thing, so I’d buy that sort of thing, you know, to support them and because it’s really great. It’s brilliant stuff. But, yes, if there were more local suppliers I would definitely buy stuff off them I think” (Female, aged 26-35, Islander, North)

Although some participants occasionally bought vegetables from farmers markets or producers’ sales this did not appear to be common practice. As many of the participants grew their own vegetables they felt the cost of vegetables at producers’ sales was excessive and did not increase the range of produce beyond what they were producing at home. For those who had grown their own vegetables in the past but were no longer able due to health problems i.e. arthritis some said they would like to purchase locally grown vegetables there was limited availability to do so.

Local produce was particularly important for certain types of products. Potatoes grown on the machair⁹ in the South, with their distinctive taste and texture, are extremely popular and highly sought after. These could be purchased directly from producers but were also sold at producers’ sales at harvest time. Some participants made an extra effort to attend the sale at this time in order to purchase the local potatoes.

“Make a special effort, I’ll find out which sale the potatoes are going to be at, turn up or send somebody down. I left work last year, I think it was the year before they were in Northbay and I nipped out from the airport between planes to go and get a sack of spuds and I was very lucky because I got practically the last sack just as the thing was opening they had sold all the potatoes,

⁹ Machair – a low-lying fertile plain; a sandy field behind a beach (Macleod, 2006)

they're really nice, they're lovely" (Female, aged 50-65, Incomer, South)

6.21 Buying Direct from producer

A variety of items including meat, fish, eggs, vegetables and potatoes are produced in Eilean Siar with some participants choosing to purchase direct from the producer in order to access the products they require. It is often necessary, when buying direct from producers, to purchase large amounts at one time requiring a large monetary outlay and adequate storage facilities in the home. The most common product bought in bulk from local producers was meat. Beef, pork, mutton or lamb could be purchased by the carcass or half carcass direct from the producer. Accessing produce in this way was regarded as economical by some and ensured meat was available in the home as required. This reduced participants' reliance on supplies in store which can be irregular and in some instances limited in variety.

"It only works out £250 for half a cow and that's a freezer full cos he slaughtered a large cow cos we're a young family...But £250 probably works out about £900 worth of meat – at least - if you were to buy it over the counter...So it's a big saving and you don't have the hassle of not having any meat to eat and maybe buy half a pig as well at a time, but that doesn't last as long – that's 90 pound for half a pig...But you do get quite a bit and its fresh – it's not pumped with anything" (Female, aged 26-35, Islander, South)

The quality of this local produce is reported as being excellent and often regarded as a healthier choice as participants know how the animal was fed and reared. The extent to which participants bought directly from producers varied between households. Those who produced some of their own food or were passionate about local produce purchased little fresh produce from stores. They grew their own vegetables, reared animals for meat or fished and gifted to source most of the household food supplies from alternative sources. For others this was only an occasional purchase usually when certain products such as potatoes, lamb or venison are in season.

Those living in the south had a much better knowledge of local meat, about buying direct from the producer and knowing where and when to buy direct. This may reflect the more limited retail provision in the South, with fewer specialist stores such as butchers. There appeared to be more of a need to source elsewhere and participants invested more time and effort into sourcing this. Many felt that buying direct increased their choice and variety allowing them to access better quality produce as well as reducing their reliance on stores. However, some participants, more commonly smaller households and those living in the north, had no interest in sourcing food in this way and were not aware of how, where or when to purchase this produce.

Fresh free-range local eggs were popular with participants in all areas with many sourcing from local crofters or others in the community. Definitions of 'fresh eggs' were interesting, for many eggs were only 'fresh' when laid locally. The term 'fresh' in this instance does not merely mean food that isn't frozen, canned or picked and within recommended use by date but is linked to ideals about knowing the origin of the food. There was a general perception that local produce is superior as the proximity of supply ensures 'freshness'. The appearance, colour and taste of local eggs together with the knowledge of where they have come from and how the hens were kept and fed was important to participants. Eggs bought in store were not referred to as 'fresh' in the same way.

"My eggs I get them, I tend to buy fresh eggs. Now the post-office tends to get quite a few fresh eggs from locally. So I tend to get them. Or there's a few shops locally that have fresh eggs. I tend to go for the fresh ones...I just prefer fresh eggs. I think they taste better anyway. They certainly have a yellower yolk and you know if I bake, the colour of the sponge is completely different...But having said that, it just depends who's feeding the hens, because I've seen me buy from different people locally and there's a big difference in the yolk. It depends what they're feeding them...I very rarely buy them in the supermarket."

Interviewer - Is that a taste thing, is it?

"Yes. They're healthier as well I think."

Interviewer - You think the eggs are healthier, or they're healthier to eat?

"I think they're healthier to eat, yes." (Female, aged 36-49, Islander, North)

If local eggs were not available then participants chose organic or free range in stores in order to achieve a quality and taste similar to local eggs.

6.22 Producing/ Growing Own

Those with access to suitable land reported growing vegetables, potatoes and producing meat and eggs at home with the range and amount produced varying between households. Home produce sustained some households' demands for meat and vegetables throughout the winter months. For others only small amounts of specific items such as salad leaves and herbs were grown at home in order to have these items available in the home as they could not be purchased in their local store or those available were of poor quality. Crofting is a traditional practice on the islands and continues in order to produce meat and grow vegetables for the household and for some provides additional income. The quality, taste and knowledge of where and how their food has been produced were factors important to participants and reasons given for investing the time and effort required.

"the taste is so much better and you feel that if the taste is right then you have all the better vitamins and minerals in it as well you know, well I do anyway, same with home grown potatoes completely different to what you buy in shops ... em I mean I pride sitting down to a meal knowing everything you have eaten has been locally produced [by self], I enjoy that and I suppose there's a feel of gloat at the table knowing that you've achieved." (Male, aged 50-65, Islander, South) This participant had a family croft on which he reared sheep and cattle to maintain the croft land and provided some additional income but was not his main source of income as he had a full time occupation.

For those producing their own, the opportunity to access fresh produce from their own land (usually their garden/ croft) obviously increased the consistency of

availability and reduced their dependence on stores as the sole source of food provision. This reduced dependency on stores lead to better perceptions of availability as fresh produce such as vegetables and meat were available in the home and consumers were not reliant on store deliveries with less pressure to shop on the right days and at the right times.

“Just to have the fresh, just to have fresh veg when you wanted it really more than anything and we had plenty of ground to do it so we had no reason not to do it really you know so...although it takes a lot of work to do it especially when you working but it’s a lot better, fresher than we get in the shops” (Female, aged 36-49, Islander, South)

For certain households, being more self sufficient was a way of life. Producing and growing as much of their own food as possible increases the fresh produce available to them and decreases dependence on stores although it is hard work. Those who were most self sufficient, utilising alternative networks and barter systems varied in age and not all were originally from the islands. There were several participants with traditional family crofts for whom growing vegetables, fishing and rearing animals for food was a way of life carried on through generations although, with the exception of one participant, employment in addition to working the croft was financially necessary. Others who were producing large amounts of their food needs had returned to the islands having inherited a croft with the aim of being more self sufficient. However, this way of life was necessary for another young family with a variable income from fishing in order to provide a healthy diet for the family and allow them to partake in the informal barter economy without being solely reliant on a monetary income. This way of life, although rewarding and worthwhile was often difficult.

“We run the croft as a croft we’ve got pigs, ducks, geese, hens, sheep floating around and we plant and try and grow quite a lot of our own food. Our animals are for meat we do home kill, we’ll home kill anything the geese, the pigs anything so food shopping, meat we tend not to I rarely buy very much really because a lot of ours is just home kill. Just goes straight in the freezer so keeps down our air miles! (laughs)”

Interviewer – And do you grow vegetables and stuff as well?

“Yeh uh huh, we grow our own potatoes we usually do enough potatoes to do the whole year I don’t buy potatoes at all, onions I grow, we’ve got a poly tunnel so peas and beans and beetroot and carrots and parsnips and cabbages this year so they’ve done quite well so each year, year on year it’s just a case of building up and realising how much you’re going to eat over the year it’s quite difficult to judge, you tend to have a glut around September time when it’s all just come in and then it peters off” (Female, aged 36-49, Incomer, South)

Traditional vegetables such as carrots and onions as well as potatoes were the most commonly grown by participants as these were suited the soil and climatic conditions. Analysis of the cupboard survey (Chapter 8) shows, at the time of the interviews, 14.3% of onions and 17.9% of potatoes and carrots were home grown either by themselves or by family/friends or neighbours.

Several participants wished to grow their own vegetables and/ or meat but were unable to do so due to lack of time or insufficient land (either not enough, none or poor quality i.e. too wet and boggy) on which to grow vegetables or rear animals. Some participants had grown their own vegetables in the past but were now unable to due to a change in circumstances, such as moving to a home with no land, and expressed an interest in doing so again for quality, taste and economic reasons. One participant moved from the marital home and now has a more restricted food budget but no longer has land available for growing her own vegetables

“I do miss not having to grow my own stuff...Because it just tastes differently, even your own free range eggs there’s just something different about them and of course I used to have the duck eggs as well I used to make some really nice cakes with the duck eggs and scrambled I mean eggs are so versatile use them for anything. No there’s nothing nicer than planting from seed and growing a whole load of vegetables and then putting on the table a whole meal that you have done yourself ...I do miss that I suppose that’s why I still look for the freshest stuff I can find... I’m an outdoor person really I love being outdoors, in the spring/ summer that’s where I would be in the garden, it’s therapeutic...you save a lot of money cos I keep a lot of the seeds from what I grow for the next year so I don’t have the expense” (Female, aged 36-49, Incomer, North)

Some of those producing their own thought it was more economical than buying from stores and they could trade or barter for other food items, machinery or other services.

6.23 Hunting/ Gathering/ Fishing Locally

Fishing was a popular past time and a means of providing fresh fish for the household. Fish and shellfish were the most common foods participants obtained locally. A number of participants collected mussels, cockles and razor fish two or three times a year when in season, freezing surplus for consumption at a later date. Shellfish were considered a 'local feed'¹⁰, and available from the fishmongers, in some of the more coastal and harbour areas, but participants preferred to gather shellfish themselves as they knew where they were gathered and were therefore confident they were safe to eat.

Fishing, to provide fish for the home was seen as part of the traditional crofting lifestyle. For some it was a hobby but one that provided significant amounts of fish for the home. In certain households this was the only fish they ate as this participant, whose husband and son were out fishing at time of interview, explains

"I mean my son and my husband actually do fishing and they'd come home, say just there they'd come home this afternoon. They'd come home this afternoon with, say, two trout, two brown trout. So I know how to cook that, you know. So we might have that for our tea later on type of thing, you know. Again, you know, during the summer there, they catch salmon and we cut it up into pieces and we have it in the freezer. They were caught last year and they're in the freezer! My husband caught them fresh last year and put them in the freezer as soon as he... Salmon is, we don't actually buy salmon, because, like I said, the husband and the son fish, so they catch it. It's caught fresh!" (Female, aged 36-49, Islander)

¹⁰ Local feed – food traditional of the area, available locally and commonly collected by islanders for consumption in the home

Using local food obtained from the land and sea was something many participants enjoyed and they felt it was important to use food available locally. As well as fishing hunting game such as rabbit, pheasant, geese and venison or gathering mushrooms, berries and elderflowers also contributed to food procurement. Hunting and gathering food on the island was not essential in order to provide for the household but was regarded as a way of life or lifestyle choice. Participants felt it was important to know where their food had come from and local food was associated with healthy eating. Due to the 'natural nature' of the produce one incomer felt it was important to eat local food, particularly wild food which she received as gifts from local hunters and fishermen -

"It's flavour it's not the cost no it's mostly the flavour and the health thing I feel it's not full of all those chemicals and awful stuff they pump things full of. And I like things like liver and hearts and that kind of thing and I won't buy that kind of thing because its probably so polluted because those are the filters and do I can't look at liver on the shelves without thinking oh dear but a fresh piece of liver off of the local hunter going by with his deer is lovely, you have to be aware of things like liver fluke and things but I know what that looks like in the liver so I would know what not to do" (Female, aged 66+, Incomer, South)

6.24 Sharing/ Gifting Food

Sharing and giving food as gifts was also an important part of community and family life. Participants who caught fish or produced their own food products often gave surplus to friends, family and neighbours when visiting or as gifts. Many participants talked about giving and receiving food products as gifts and for some this provided the sole source for a product e.g. fish, for the household. This was common practice throughout the year but particularly with vegetables at harvest time when there were large gluts of vegetables. As these were difficult to store or preserve they were often given away to ensure nothing was wasted.

Many of the foods produced and given as gifts contributed to the traditional island diet and have nostalgic connotations with the past. Those receiving these food gifts

were appreciative of the excellent quality, freshness and distinctive tastes of local produce such as fish and potatoes.

“These potatoes are the best ones because I have tasted them last Sunday I was given some from the machair land and they were just beautiful they taste different I think that they do because I was brought up with them there’s a difference the taste is better and they are drier and whiter in colour and the smell of the machair they’re just lovely they are a lot better home grown potatoes I think” (Female, aged 36-49, Islander, South)

Fish was probably the most gifted product amongst participants and this was substantiated by findings from the cupboard survey where 53.4% of those who had salmon in their home at time of interview and 50% of those with haddock had obtained it by means other than from a store or mobile fishmonger. The National retail survey showed haddock fillets to be available in 58.3% of stores and salmon available in only 15% of stores throughout this island group. Interviews and cupboard surveys suggest some participants had difficulties obtaining these products however, others had alternative sources. This practice of sharing the catch is traditional in these communities where extra is gifted to other members of the community as this crofter in a remote harbour village explains.

“Again we’ve been used to that yes, if you caught more than you could eat for the day then you would take out enough for the dinner and give a neighbour who didn’t have a fisherman in the house some for their dinner and anything left when you’d done your delivery round then you would put it in the freezer as a standby emergency thing” (Male, aged 50-65, Islander, North)

Fishing is a traditional occupation with many fish farms also located throughout the islands, which participants reported receiving fish and shellfish from. Although a number of participants reported receiving fish from those who worked on fish farms none bought directly from the farm. Frequency and quantities of these ‘gifts’ varied, some participants received no fish as gifts and had trouble accessing fresh fish but

for others gifted fish provided the only source for the household. This participant had a freezer specifically for fish all of which was received as gifts and provided enough for the family of three

“Just friends who are fishermen and there’s haddock fillets or scallops or prawns or what, all kinds of different eh we have a fish dish of some description twice a week. He likes his fish whether it be haddock or scallops or herring or mackerel it’s not the same type the twice but it’s either shell fish or fish” (Female, aged 36-49, Islander, South)

This practice of sharing and gifting food is traditional in these island communities in order to look after the community, ensure everyone is provided for and all food produced, caught and harvested is consumed and nothing wasted. This adds to the close community spirit of the area and is reported as more prevalent in some of the more rural villages

“Well everybody shares whatever they’ve got because usually you’ve got too much of things, in fact that’s a very old custom ... so when the fishermen went out to catch there wasn’t, in the old, old days, there wasn’t this selling you know commercial fishing it was for themselves or their village and if they had too much, if they had too much then they made sure especially the elderly would get some or the widow or the orphan and they would share out that way which is a very nice way of taking care of a community and there is a lot of that concept still here although the need is not as strong as it used to be but eh I certainly benefit from their kindness” (Female, aged 66+, Incomer, South)

As this quote suggests while sharing and gifting food was no longer essential in terms of providing food for the household it continues adding to the sense of community and is appreciated and enjoyed by those receiving these gifts.

6.25 Barter

An informal barter system was predominant amongst participants in the South where more people produced their own goods. Surplus produce such as vegetables, potatoes, fish and eggs were often exchanged for other produce, use of farm machinery or help with harvesting.

There appears to be different levels of barter dependant on the importance placed on this system in overall household food procurement. For those most reliant on this system to obtain food for the household deals are made and agreed at time of barter. While for others it is more informal and based on reciprocation with goods exchanged as and when they become available, which may be weeks apart. Irrespective of this, the barter system is based on trust and appears to build to the sense of community. Those who partake in this system benefit from the exchanges and enjoy the opportunity to obtain fresh local produce.

The importance of barter in household food procurement varied, for some households it was a simple way to share excess produce at times of harvest whereas for others it was an essential part of their lifestyle in order to achieve a varied diet on a limited budget.

“We eat a lot of fresh fish, when we can get it but buying it from the fish van is a bit expensive. So its when the local boats are in if you know the crew on them I will usually try and get from there...we usually just get the fish for nothing – cos we know who they are and a favour for a favour sort of thing.” Fish traded for potatoes (Female, aged 26-35, Islander, South)

Bartering enabled some participants to trade goods and services. However, for most it was more about achieving a sense of community and sharing food was seen as a traditional feature of island life, which many appreciate and enjoy.

“But we’ve got friends across the road that have got a poly-tunnel and I do kind of things for them like pick up their papers in town if I’m in or look after the dog if they’re going, and in return get

things like peppers and French beans and garlic and all sorts of things out of their poly-tunnel.” (Female, aged 50-65, Incomer, North)

6.26 Knowledge and Skills

Particular skills are required for those producing their own meat. Although home kill is not permitted for meat being sold to others it can be carried out for household consumption. Some participants talked about the skills required to kill and butcher the meat, skills passed down through generations. One crofter no longer carried out home kill on a regular basis but planned to do so at some point in order to teach his son.

Those producing their own food were often inventive and adventurous in the food they produced from raw ingredients, learning the skills and methods required to store and preserve their produce such as making black pudding and sausages, curing meat and smoking fish.

For some, having to deal with a less processed animal is unappealing as this participant explains

“I don’t know what happened whether she got the wrong kind or they didn’t fatten up as they should have yes it’s so or else she was quite willing to kill them but I think she wanted other people to pluck them or gut them and most people aren’t so keen on that idea, don’t really want that just thank you here’s a nice organic chicken killed, plucked, gutted for you”

Interviewer – Like how you would get it from the supermarket?

“Yes I suppose it is nice at times getting your food all ready for you, conveniently packaged, but it would be great... [To have local chicken] ...its getting it to the point of cutting it up takes a bit more skill than just removing the plastic” (Female, aged 50-65, Incomer, South)

Storing and preserving vegetables also require specific skills and knowledge which participants did to varying degrees. These included blanching and batch cooking

vegetables for freezing, pickling vegetables, making jams, chutneys, sun drying tomatoes and preserving chillies in oil, all required time and effort.

From planting and breeding to home kill and preserving these skills have been taught, learnt through trial and error or in some cases from reading books. These are all necessary in order to be able to produce a good quality and quantity of produce and be able to maximise its shelf life and usage.

6.27 Why are Alternative Networks Used?

6.27.1 Supporting local producers

One of the most common reasons participants gave for using alternative food networks was a desire to support local producers and businesses. Many participants felt it was important to eat food grown, reared and produced locally. For most the idea of 'local' was regarded as that produced on the island on which they lived or other islands in Eilean Siar but when asked how to define 'local' it included products from mainland Scotland and then the whole of the UK, with the preference being for produce originating as close to home as possible. Where the choice was available many participants choose island produce or business over that from the mainland or further a field, such as choice of mobile fishmonger.

"I wouldn't mind buying it from one girl cos she's local but one guy comes from Buckie and sells and I don't really like the idea of that you know that he's coming over with fish when there's plenty of fish here and it's not going to be as fresh, I don't think it could be as fresh... he should go somewhere else, go to a city and sell his fish"
(Female, aged 50-65, Islander, South)

6.27.2 Desire to eat local food

Several participants felt it was important to eat food produced on the islands and thought more effort should be made to increase production and increase the amount and variety of food produced locally in order to make the islands more self sufficient

and less reliant on ‘importing’ food from the mainland or further a field. Many participants invested time and effort to use local products

“I feel the same about fruit and vegetables as I do about everything else, I would like to be eating locally produced things I managed to get some apples that were grown in Barra at the last producers sale, there are little crab apples growing down in [islanders] walled garden down in Northbay and they turned up so we had very tart apple crumble and apple pie but they were, I feel... I do love oranges and grapes and things but I would rather eat things that I get here em there’s someone in Vatersay got elderflower trees which you can make wine and lemonade with and you can also make red wine and white wine from the berries and the flowers and lemonade from the flowers...so I have done that...” (Female, aged 50-65, Incomer, South)

6.27.3 Quality, Taste and Value

Foods obtained through alternative networks were reportedly excellent and superior in terms of taste and quality to those available in stores. Those purchasing meat direct from local producers did so in order to ensure they had a constant supply of meat available in the home so they were less reliant on irregular supplies in stores. Buying meat in this way was purportedly less expensive both in terms of initial purchasing and the increased quality of the meat meant the diet did not need to be supplemented with additional foods in order to add bulk to the meal, as had been previously necessary for this participant with a young family.

“I buy super noodles and things to go along with the meal for ourselves just to bulk out stuff before when we were buying [meat] from the shop but we’re finding now the size of the roasts don’t shrink when your cooking the fresh stuff not like it does when you have the shop bought you don’t actually need anything else to go with it.” (Female, aged 26-35, Islander, South)

For other participants’ home grown vegetables, have a distinctive taste unlike vegetables purchasable from stores. Participants were animated in their enthusiasm for home grown vegetables with some reportedly eating more vegetables when they were in season claiming that those bought from the store just didn’t taste the same, even if they were organic.

The extent to which households were self sufficient, producing enough potatoes, vegetables, eggs, meat and fish varied between households. Finding supplies of meat, fish and eggs throughout the year were easier to achieve than sourcing potatoes and vegetables, due to seasonality and storage difficulties. Producing meat and vegetables to sustain the household was very time intensive, requiring adequate land and storage space. This produce was often eaten as it was harvested and the months following, with more reliance on stores when produce is out of season.

6.27.4 Traditional

Fishing, growing vegetables and keeping animals for meat and eggs are traditional crofting practices on the islands. These traditional practices continue but for most have been scaled down to incorporate more contemporary aspects of island life such as working away from the home. A number of crofting households continue to grow vegetables and keep animals for food through habit, enjoyment of the process, economic benefits and preference for the taste and quality of home produced food.

6.27.5 Increase Availability

The national retail survey (Dawson et al, 2008) showed fruit and vegetables to be reasonably available throughout Eilean Siar with provision varying between stores however, travel distances required to access stores with a larger range were considerable for some and this was a factor which influenced some participants' decision to grow their own vegetables.

"Just because I enjoy it. And because it's not possible to go to a shop 5 minutes down the road and buy them. Maybe if I had a shop 5 minutes down the road I might be lazy and buy them. But I don't think so, I quite enjoy pottering around outside." (Female, aged 50-65, Incomer)

Some participants who felt provision of fresh vegetables and meat in stores was inadequate adapted to this situation by using alternative networks in order to increase

the produce available to them. Although vegetables were available in stores many participants felt the quality was poor. For those with the land, time and skills necessary in to grow their own they did so to increase the consistency of supply and quality of vegetables available to them.

“Just to have the fresh, just to have fresh veg when you wanted it really more than anything and we had plenty of ground to do it so we had no reason not to do it really you know so...although it takes a lot of work to do it especially when you working but it’s a lot better, fresher than we get in the shops” (Female, aged 36-49, Islander)

Using alternative food networks increased the variety and quality of produce available to those on a limited budget with economic factors being the driving force behind using these alternative food network’s. Growing their own potatoes and vegetables, buying meat in bulk direct from producers and bartering for items they do not have enabled them to have a more varied diet than would be available and affordable to them if confined to using stores alone.

6.27.6 Health

Participants associated local produce with ideas of health and healthfulness and this was given as a reason for using alternative food networks and a benefit of the produce obtained through these networks. They felt it was important to know how the products had been grown or produced in regards to what pesticides and chemicals had been used and felt it was beneficial to health for the products to be as natural as possible. Knowing where and who produced the products with some idea of how they were grown or reared offered participants piece of mind in terms of well-being.

6.28 Barriers to using Alternative Food Networks

6.28.1 Access

Participants used these alternative food networks to varying degrees. Barriers to using these networks included lack of time or suitable ground to grow their own or limited knowledge about alternative sources of supply. For others this option was not feasible due to lack of storage space or the inability to purchase smaller amounts.

“There are people who would sell you meat here, and we did buy some once. But you’ve got to buy about half a hundredweight of it. I don’t know whether it was the abattoir or... You get some beef, you get some pork, you get some lamb, you get some sausages. You have to buy a lot of it and we haven’t got the store for something like that.” (Male, aged 66+, Incomer, South)

Accessing local producers sales required some ‘local’ knowledge as these were not well advertised and not everyone in this study was aware of their existence, times or location and frequency. Those who had knowledge of these sales but did not use them perceived the produce on sale to be limited and expensive.

Where availability of fish was limited in the retail stores it was plentiful if they knew where to source it. Even in harbour towns some products, such as fish and shellfish, were difficult to purchase in stores and knowledge of alternative sources was often required in order to access certain products in this group

“You can’t buy shell fish from the fish van here can you, claws and stuff, you can buy clams but you can’t buy crab or stuff you could go down and ask off the boats and stuff ... a local feed and you can’t buy it here” (Female, aged 26-35, Islander, South)

Although local boats harvests crab it is exported for sale and less available to purchase locally. Several products produced in Eilean Siar such as salmon and shellfish have a large export market. While some participants used local produce to reduce household food costs these tended more towards raw products and some felt items such as smoked salmon was expensive and catered more for the export market.

6.28.2 Health

The physical aspects of growing vegetables and rearing animals for food was one barrier which reduced some participants' ability to partake in this practice. Irrespective of age, although this was a factor for some, some participants had experienced physical difficulties which had stopped them producing their own food, either short or long term. For some these health problems are progressive and will increasingly reduce the quantities they are able to produce. For others this was short term and they have been hindered, or temporarily halted, but intend to produce their own food again in the future in order to reap the benefits of doing so

"I have in the past grown my own em until I had a very bad back I had an operation a couple of years ago but I intend to grow my own again because I'm much more likely to eat it ... Yes if I've grown it I'm much more likely to eat it because I know where it's from what it's got on it and it tastes better"

Interviewer - So what kinds of things did you grow?

"Oh everything carrots, potatoes, particularly salad vegetables you know lettuces and rocket and em I did grow tomatoes in a conservatory which were excellent as well em leeks, cabbages"
(Female, aged 36-49, Incomer, South)

6.28.3 Land Availability

Individuals living in council accommodation or with small or no gardens did not have the opportunity to grow their own vegetables (although some had machair land away from the home where they grew potatoes). Those who did not have their own

land found it difficult to rent land although a few participants used unused land belonging to a family friend or common grazing but this had been problematic

Interviewer – You say you grow your own potatoes – what else?

“Cabbage, onions, carrots eh a few other things but they didn’t come on – leeks we did this year again but they weren’t that great spring onions didn’t take, runner beans cos we don’t have our own croft its someone else’s and its been kind of over-used lately and things didn’t take too well this year a lot of weeds on our croft so... we do pretty much grow a lot but it just depends whether it takes or not”

Interviewer – So do you rent that of somebody?

“No its just a wee patch but we don’t have anywhere for next year and the year before it was just common grazing but there was complaints...politics...but were going to ask someone for a little bit somewhere else this year again” (Female, aged 26-35, Islander, South)

6.28.4 Difficulties growing vegetables

Producing potatoes and vegetables is hard work and time consuming with many difficulties reported by participants. Problems ranged from obtaining land on which to grow crops, quality of land, disease and weather restrictions some of which had hampered crops or stopped production completely.

“Well we used to. We used to but we had carrot-fly and that is a disaster and we had club rot, so we had to leave the ground for a few years to... So maybe this year, weather permitting, we’ll try something out.”

Interviewer - So when did that happen?

“It’s a couple of... a few years ago and not last year, but the year before, we tried some carrots and veg and it was still around. So the carrots, they come up, you know, they start growing but the tops turn limp and they don’t grow bigger than... [Inch]” (Female, aged 66+, Islander, North)

Without suitable land of good quality, quantity and quality of produce is compromised. For those reliant on good yields to sustain their household through winter months and surplus for barter this can be problematic. It may affect the diet and variety of produce consumed by the household. Providing land was available animals were reportedly easier to produce than vegetables as this crofter explains

“Hard work, very hard work, potatoes we grow all ourselves for the last must be... feels like for ever must be for about the last four years we’ve grown our own potatoes, we make our own bacon and sausages and burgers and things like that so that side of it works really well he’s cured meat and done like the Spanish hams he’s quite adventurous so he does all that kind of thing em so the vegetables I’m not fairing so well on that’s actually harder to get going and keep going because when your trying to grow it you’ve got slugs and god knows what else you know your competing with everything else that wants to eat the food you want to eat and try not to put chemicals on the ground because you are going to kill other things the knock on effect, that’s quite hard work really is hard work but it’s enjoyable.” (Female, aged 36-49, Incomer, South)

6.29 Conclusions

Alternative food networks are part of traditional island life and represent one way to increase the availability of fresh produce. Crofting involves growing vegetables, rearing animals and fishing in order to provide food for the household. Island culture plays a part in these networks as the idea of community is strong, particularly in remote areas, where food is often shared, gifted and bartered. Alternative food networks are used to varying degrees and complement the use of retail stores to increase the range of produce available and reduce wastage. In order for consumers to utilise mobile shops, local produce sales and specialist suppliers such as the fishmongers they must have knowledge of where and/ or when to access them. Without this knowledge these options are not available to all consumers.

These alternative food networks represent one aspect of remote consumers “coping mechanisms”. These are needed, particularly in the south and some of the more remote areas of the North, in order to compliment the conventional retail system and

increase the range and quality of produce available. These along with other “coping mechanisms” such as combined shopping trips and social support networks are successful in improving the produce available to consumers and improving access to stores. Combined shopping trips and social support networks enable consumers to overcome distance issues and personal time constraints.

The ways in which stores are managed and how local retailers adapt to supply issues and limited storage facilities in store are important in determining the availability of produce and consumers shopping experience. Services such as ordering special items, reserving milk and delivering produce by bus are just some of ways in which retailers can improve food access for those who are restricted by time and distance constraints. However, not all participants were aware of these options.

CHAPTER SEVEN

SHOPPING DIARY

7.1 Introduction

Shopping diaries were used to record participants shopping behaviour and to provide a detailed description of individual shopping routines (See chapter 3). These were used to build a picture of how participants shopped on a weekly basis in terms of frequency, travel and linked activities. This data complements the descriptions of shopping routines provided in individual interviews.

As discussed in previous chapters, the food retail structure in the North of the Western Isles is quite different to that in the South, as are the store delivery schedules. For these reasons this chapter compares data from participants in the North to that of participants in the South to determine whether these factors influence their shopping routines.

7.2 Shopping Occasions

Of the 56 participants interviewed 41 completed and returned the 7-day shopping diary. 20 diaries were completed in the North and 21 in the South. Each participant recorded all food shopping occasions over a 7-day period. Over the 7 day periods a total of 194 shopping occasions were recorded, 87 of these in the Northern Western Isles (North) and 107 in the Southern Western Isles (South). The mean number of shopping occasions per participant was 4.73 and the median 5. This chapter reports on the data from the shopping diaries combined with interview transcripts to explain some of the shopping patterns which emerged.

7.2.1 Shopping Purpose

Figure 7.1 - Purpose of Shopping Occasion

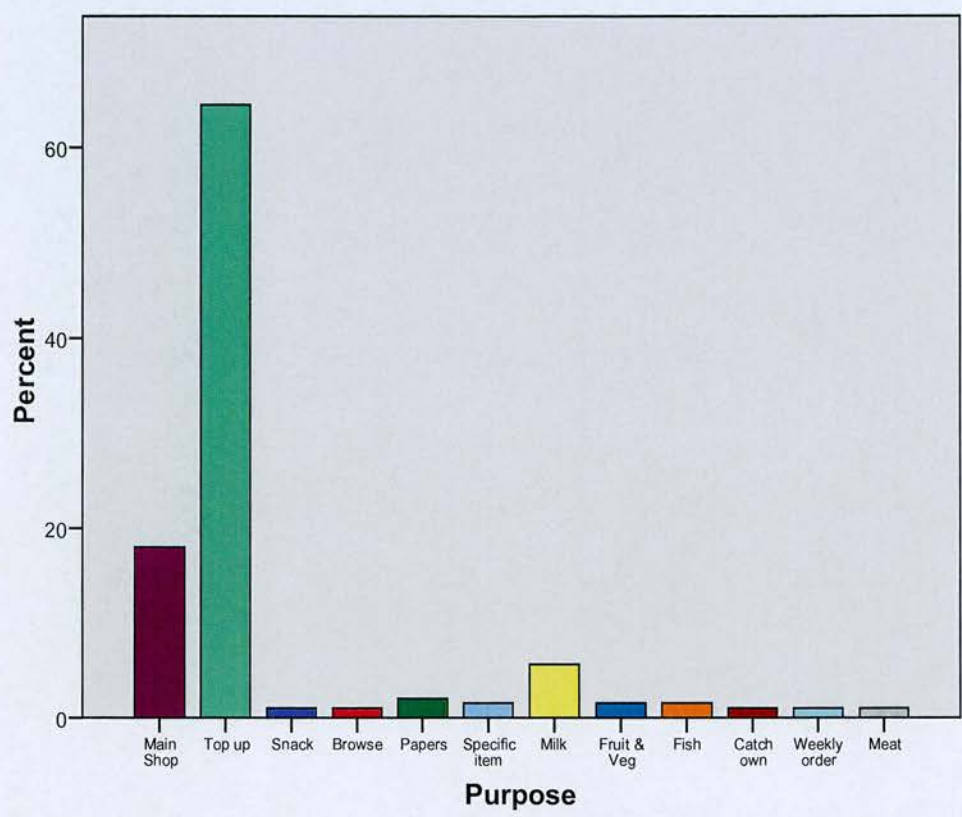


Figure 7.1 shows a total of 194 shopping occasions were recorded within the 7-day periods. Of these, 18% were described as ‘main shops’, 64.4% were ‘top up’ shops and the third most common reason given for these shopping trips was to buy milk (5.7%).

The term ‘main shop’ was used by participants to define a shopping trip in which they bought all or the majority of the household food shopping, in a single visit. The frequency with which participants carried out the main shop varied from once a fortnight to twice a week, but most carried out one main shop each week. Those who reported carrying out a main shop only once a fortnight lived in Harris and had to travel up to Stornoway on Lewis to reach the large supermarket, a trip with a drive

time in excess of 1 hour each way. Those carrying out two main shops in one week were those living in the Southern Isles and particularly in areas where only a small store was available i.e. Barra.

‘Top up’ shops were defined as those carried out in between the main shop in order to replenish stocks in the home. The quantity and frequency of this shopping type also varied from once a week to some who carried out two or three ‘top up’ shops each week. Those who only use small stores tended to use these frequent ‘top up’ shops instead of a ‘main shop’. Other types of shopping trips used by participants included visits to purchase a specific item such as milk, meat, fish or fruit and vegetables (Figure 7.1).

7.2.2 North/ South Comparison of Shopping Purpose

Table 7.1 - North/ South comparison of shopping occasion/ purpose

Shopping Purpose	Northern Isles (% of shopping trips n=87)	Southern Isles (% of shopping trips n=107)
Main Shop	17.2	18.7
Top up	59.8	68.2
Snack	0	1.9
Browse	0	1.9
Papers	0	3.7
Specific item	1.1	1.9
Milk	12.6	0
Fruit & Veg	1.1	1.9
Fish	2.3	0.9
Catch own	2.3	0
Weekly order	1.1	0.9
Meat	2.3	0

Table 7.1 shows, participants classified 17.2% of all shopping occasions in the North of the Western Isles as a 'main' shop and in the South this was slightly higher 18.7%. 'Top up' shops contributed to a larger percentage of total shopping occasions in the South (68.2%) than in the North (59.8%), reflecting the type of store available to each part of the islands. Those in the South tended to shop in the same store frequently however, this differs in the North where there is more of a tendency to carry out one large shop once a week or fortnight with smaller top up shops comprising of more basic items such as milk and bread in a small local store or in a specialist store such as the butcher. Again this reflects the types of stores available in these areas with those in the South often reliant on only one medium or small store relatively close to home whereas those in the North have one large store but this may be further from home. There are more specialist stores such as butchers/ bakers available in the North (n=11) than the South (n=5).

In the South the stores available to participants tended to be smaller than the main stores in Stornoway in the North. Shopping frequency was higher in the South as a result of reliance on these small stores as they can only carry a limited amount of stock and fresh produce was only delivered three times per week. In the North a weekly shop was more common as stock was delivered to stores six times per week and therefore well stocked most days throughout the week. Consumers often had to travel long distances to the main stores in Stornoway and therefore shopped less frequently due to the time and cost implications of shopping more frequently.

A milk delivery round operated in some areas of the North and this milk delivery accounted for 12.6% of all shopping occasions in the North. Participants in the South did not report the availability of this service and as such purchasing milk was tied into main and top up shopping trips.

7.3 Store Choice

There were a range of 14 different store types recorded by the participants in the 7 day period, however not all of these store types were available in all of the areas in the study and this is reflected in the usage of different store types between the north and south (Table 7.2). These store types are the classifications used by participants and include those discussed in chapter four. The additional classifications shown in table 7.2 are included to show usage of different types of specialist stores such as butchers and fishmongers and alternative food sources such as home produced items.

Table 7.2 – Store type used for shopping trips

Store Type	Whole Sample % of shopping trips	North % of shopping trips	South % of shopping trips
Chain Supermarket	45.4	41.4	55.6
Private Supermarket	11.3	0	23.5
Community Co-op	4.1	1.1	7.5
Small Independent	17.5	16.1	21.4
Butcher	6.7	11.5	3.2
Fish Van	1.5	1.1	2.1
Grocery market	1.0	1.1	1.1
Delivery	5.7	12.6	0
Grocery van	1.5	3.4	0
Home produced	1.0	2.3	0
Spar-Garage forecourt	2.1	4.6	0
Bakers	1.0	2.3	0
Gift	0.5	1.1	0
Health food store	0.5	1.1	0

The Co-operative group was the main chain supermarket throughout the western isles with only one medium size Somerfield available in Stornoway, in the North. Therefore main household shopping was primarily carried out in a branch of the co-

op (82%). Some participants preferred Somerfield for their main shopping in the North, while one of the two independent supermarkets was the store of choice, where it was available in the South (11.3%).

These store preferences were linked to convenience, choice, quality of produce and supporting local business (See chapter 5). Generally, the largest store available to consumers was the one they used for their main household shopping. This is perhaps unsurprising as the national retail survey (Dawson et al, 2008) found there was a wide variation in the availability of the HEISB in different store types, with only large, and some medium, size general stores regularly stocking the entire HEISB. Table 7.2 shows chain supermarkets were the most frequently visited store type and accounted for 45.4% of the shopping occasions recorded. These chain supermarkets vary in size throughout the different areas and were the only choice of store in some areas, particularly in the south.

Private supermarkets were only located in the South of the Western Isles and accounted for 11.3% of shopping occasions. These private supermarkets were located in Benbecula and South Uist and were not easily accessible to the whole of the Southern Isles and only the store in Benbecula was used for main shopping trips. Despite having a medium size store closer to home some participants chose to travel 20 miles to this private store as it was thought to have a better range of produce and more consistent availability. Small independent stores were most commonly used for top up shopping and these contributed to 17.5% of shopping occasions. Specialist stores such as butchers/ bakers' etc accounting for 10.7% and delivery of food items to the home 7.2%.

7.3.1 North/ South Comparison of Store Choice

There are differences in the types of stores available in each of the two areas therefore the store types accessed vary. Table 7.2 shows chain supermarkets to be the preferred store choice in both areas accounting for 48.6% of all shopping occasions in the South and 41.4% in the North. Where private supermarkets are

available in the South they are used for 20.6% of all shopping occasions recorded. Supermarket visits account for 69.2% of all shopping occasions in the South and 41.4% in the North. As table 11 shows participants in the north use a greater selection of store types and this is ultimately because there are a greater range of stores in the north.

If community co-op's are included in the 'local store' category, as they are often smaller local stores, 25.2% of all shopping occasions in the South and 17.2% in the North were in 'local stores'.

Specialist stores such as butchers and bakers account for 27.1% of shopping occasions in the North and 5.6% in the South. Use of specialist stores in the South is likely to be smaller as there are fewer specialist stores available than in the North. There were only 5 specialist stores in the South with 11 specialist stores in the North (See map 2, pg 63). In the North preferences for purchasing meat from a butchers rather than from a supermarket were expressed. This was the preferred choice because they were believed to offer better quality produce and specific volumes and consumers could buy in the quantities they required. However, this option was not available in some areas of the South and concerns about the quality and lack of choice of meat in some stores arose during interviews.

7.3.2 Store Choice for Shopping Purpose

Chain supermarkets were used for 82.9% of the 'main shopping' whilst private supermarkets were the choice for 14.3% and community co-op's accounting for 2.9% (Figure 3). Chain supermarkets also dominated the store choice for 'top up' shops (44%) with 11.8% of 'top up' shops carried out in private supermarkets. Despite no 'main' shopping being carried out at local stores, 22.4% of 'top up' shops took place in this store type. If community co-ops are included in this store type, as they are often smaller local stores, this increases to 28%. A butcher's shop was used, at least once, by 22% of those who completed the shopping diary in the seven-day period.

7.3.3 North/ South Comparison of Store Choice for Shopping Purpose

All 'main' shopping occasions in the Northern Western Isles were carried out at a chain supermarket. In the South the 20 'main' shopping occasions were split between chain supermarkets (70%), private supermarket (25%) and a community co-op (5%).

'Top up' shopping was most commonly carried out in a chain supermarket both in the North and in the South. Of the 52 'top up' shopping occasions in the North 40.4% of these took place in a chain supermarket, there were no private supermarkets available. Of the 73 'top up' shopping occasions in the South 46.7% of these were carried out in a chain supermarket and 20.5% in a private supermarket, therefore supermarkets were used for 67.2% of all 'top up' shops in the South. Supermarkets irrespective of size were used for a higher percentage of top up shopping as they are the only option in some areas such as Sollas in North Uist. As both supermarkets in the Northern isles are located in Stornoway, those living further from the town use the smaller independent stores in between main shops.

Local stores accounted for 25% of 'top up' shops carried out in the North and 20.5% of those in the South. If community co-ops are added to this 'local' category then this rises to 26.9% in the North and 28.7% in the South. Local independent stores and community co-ops were used for top up shopping as they tended to be closer to home. Items purchased during these trips included staples such as bread and milk.

All deliveries carried out in the 7-day period were milk as part of a milk round and in the North. Use of grocery vans for 'top up' shopping was only recorded in shopping diaries in the North (2.4% of 'top up' shopping). The use of grocery vans was discussed during interviews in the South¹⁰ and despite the service being valued the mobile grocery vans had ceased trading in some areas of the south.

¹⁰ However, these participants did not return their shopping diaries.

Specialist shops were used in both the North and South for specific items and ‘top up’ shopping although to a greater extent in the North, 16% of shopping occasions compared with only 5% in the south islands. Butchers were the most frequented ‘specialist’ store in the study accounting for 6.7% of all shopping occasions. Three quarters of the shopping trips to the butchers took place in the North and the remainder in the south. There were relatively few trips to a baker (1% of all shopping occasions) and these occurred in the north. Fish vans only accounted for 1.5% of the total shopping occasions predominantly (66.7%) in the South. The only health food store, available in the North, was visited by one participant on one occasion during the 7-day period.

7.4 Shopping Patterns

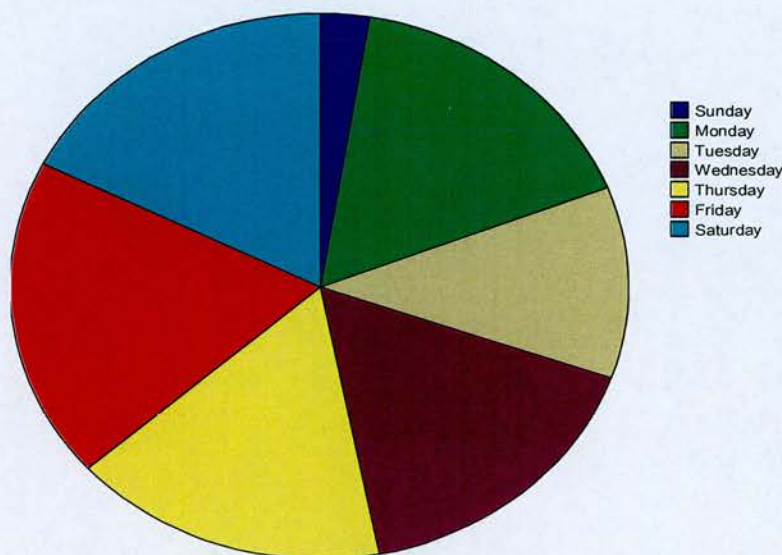
Of the 194 shopping occasions recorded over the 7-day period 44.8% of these were carried out in the North and 55.2% in the South. Figure 7.2 shows that two thirds of participants in the south carried out shopping on five or more occasions during a seven day period whereas only 45% did so in the north.

Table 7.3 – North/ South comparison of number of shopping trips during the 7 day period

Number of Trips	Participants In North	Participant in South
1	0	2
2	3	2
3	2	3
4	2	4
5	7	3
6	1	3
7	4	1
8	0	2
9	2	0

7.4.1 Day of Week Chosen for Shopping

Figure 7.2 - Day of the week shopping carried out



Shopping occasions were fairly evenly split over the working week with Friday being the most common day to shop (19.1%) and Sunday the least (2.6%), shown in figure 5. However, the 'main' shopping' trip was most commonly carried out on a Friday (28.6%) or Saturday (20%). In the North few stores open on a Sunday and those that did were garage forecourts, which stock only a minimal range of produce (Dawson et al, 2008). In the south stores open on a Sunday will not have received a delivery for a few days, therefore it is likely stock in store will be low and unsurprising few chose to shop on a Sunday.

7.4.2 North/ South Comparison of Shopping Patterns

Again there are differences between the Northern and Southern areas and the pattern of shopping behaviour. Table 13 below shows, in the North of the Western Isles Friday is the most common day for the 'main' shop (40%), with no 'main' or 'top up' shops carried out on Sunday. However, the day for the 'main' shop is more evenly spread in the Southern Western Isles where the most frequent day is

Wednesday (25%) but also takes place on Thursday (20%), Friday (20%), Saturday (20%) and Monday (15%). Despite the ‘main’ shopping day being quite evenly spread over the rest of the week no ‘main’ shops were carried out on a Tuesday. From interviews, the south is more dependant on store deliveries and this is influential in determining ‘shopping days’ to ensure there is adequate choice in store. Whereas in the north there is a more constant supply in store each day and 40% of participants in the north chose to carry out their main shopping on a Friday as it was more convenient in terms of participants free time.

Table 7.4 - North/ South differences in shopping day/ purpose

	Main Shop (%)	Top up (%)
North		
Sunday	0	0
Monday	6.7	19.2
Tuesday	13.3	11.5
Wednesday	6.7	11.5
Thursday	13.3	23.1
Friday	40	15.4
Saturday	20	19.2
South		
Sunday	0	5.4
Monday	15	17.8
Tuesday	0	13.7
Wednesday	25	13.7
Thursday	20	15.1
Friday	20	19.2
Saturday	20	15.1

7.4.3 Choice of shopping day and Work Commitments

Of those who work full time and carried out a ‘main’ shop in the 7 day period, 42.9% did so on a Saturday. Of those who were retired none carried out their ‘main’ shop on a Saturday and choose Monday (28.6%), Wednesday (28.6%) and Friday (28.6%), as their preferred days for the ‘main’ shop, suggesting the lack of time restraint allows more freedom of choice in shopping day and correspond these with the delivery days in the South.

The frequency with which participants carried out food shopping was affected in the same way as choice of shopping day in relation to work commitments, with those without work commitments carrying out a higher proportion of shopping trips. Retired participants represented 23.2% of the sample and accounted for 29.4% of all shopping occasions, those in full time employment represent 30.4% of sample and carried out 27.3% of all shopping occasions and 32.1% of sample are those in part time employment (8-29 hours) and carried out 26.3% (Table 7.5).

Table 7.5 - Percentage of those in different types of employment and the day of week chosen for food shopping

Day of Week	Full time (30- hrs)	Part time (8-29 hrs)	Part time (Under 8 hrs)	Retired	Full time higher education	Not in paid employment/ not seeking work
Sunday	3.8	2	0	1.8	0	5.6
Monday	17	15.7	20	19.3	10	11.1
Tuesday	13.2	10	0	14	10	5.6
Wednesday	11.3	17.6	40	17.5	20	16.7
Thursday	15.1	17.6	0	14	20	27.8
Friday	20.8	15.7	40	19.3	30	11.1
Saturday	18.9	21.6	0	14	10	22.2

7.4.4 Shopping Times

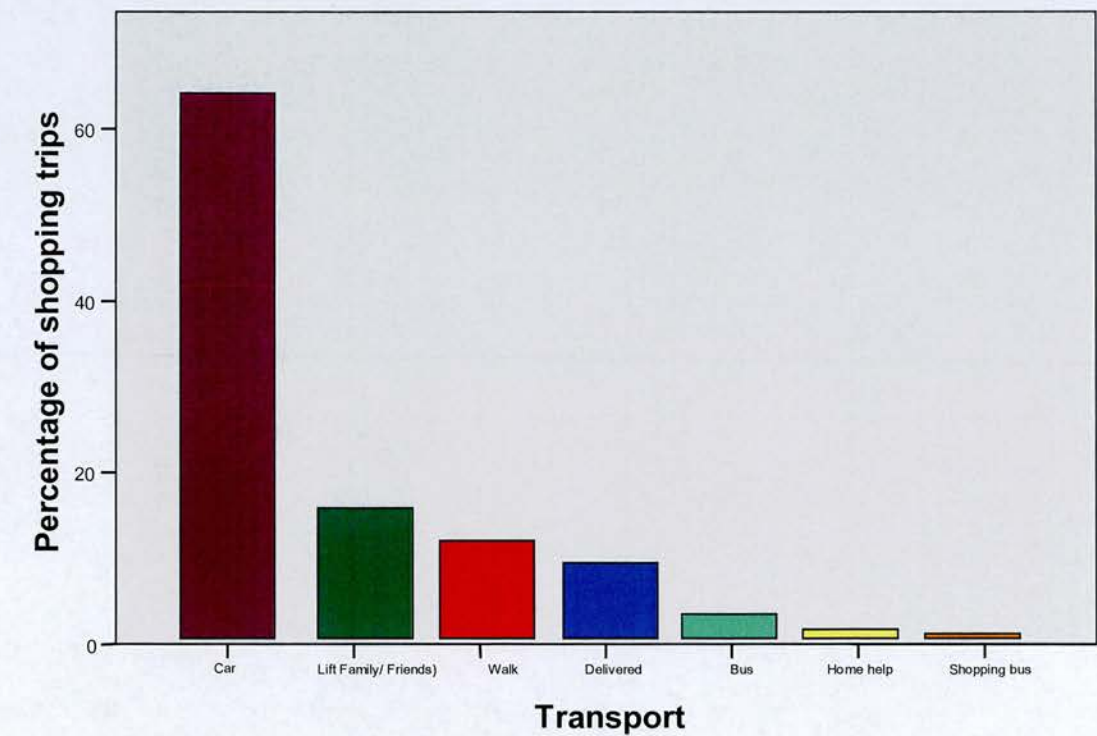
Shopping times are predominantly between 10.00 am and 4.00 pm and spread quite evenly within this time. The time of day shopping takes place is also quite consistent over the days of the week but the most common time for the ‘main’ shop is between 1401 and 1600 hours on a Friday (11.8%) and the most common times for ‘top up’ shops are between 1401 and 1600 hours on a Monday (6.3%) and between 1201 and 1400 hours on a Friday (6.3%). Particularly in the South participants

reported that deliveries arrived in store around mid morning or early afternoon therefore this was the best time to shop in order to have optimum choice in store.

7.5 Transport

A car was the most common form of transport used for food shopping. 63.4% used their own car for food shopping and 12.4% received a lift from a family member, friend or neighbour. 8.8% of all shopping occasions were delivered to the door by a commercial service and 1% delivered to the home by a home help. 11.3% of shopping occasions were carried out on foot. The bus was used for 2.6% of shopping occasions and a special ‘shopping bus’ service for the elderly and housebound was used for 0.5% of shopping occasions in the 7-day periods.

Figure 7.3 – Percentage of shopping trips carried out by each mode of Transport



7.5.1 Mode of Transport for Shopping Purpose

A car was used for the majority of the ‘main’ shopping carried out (91.4%). 74.3% of these were in a personal car and 17.1% received a ‘lift’ from family/ friend or

neighbour. None of the participants walked to carry out their ‘main’ shopping. ‘Top up’ shopping was also mainly carried out by car (78.4%) although 15.2% walked to the store for ‘top up’ shopping and 4% went by bus (public transport).

7.5.2 Distance Travelled to Shop

Table 7.6 - Distance Travelled (miles) by participants (%) for Shopping Purpose

Purpose	0	<1	1.1-5	5.1-20	>20.1
Main	0	25.5	14.3	31.4	29.4
Top up	2.4	40.8	29.6	16.8	10.4

For all the shopping occasions recorded, 43.4% required participants to travel less than 1 mile (This includes home deliveries). 19.8% of all shopping occasions required participants to travel over 10 miles and 5.6% over 30 miles (Table 7.6).

Table 7.7 – Percentage of participants using different modes of transport to carry out main or top up shopping and the distances travelled (Miles)

Transport	Purpose	<1	1.1-5	5.1-20	>20
Car	Main	21	12	21	21
	Top up	16	26	14	6
Walk	Main	0	0	0	0
	Top up	14	0.8	0	0
Bus/ Shopping bus	Main	0	3	0	6
	Top up	0	1.6	0	1.6
Lift (Family/ friends)	Main	6	0	6	0
	Top up	0	0.8	2.4	0
Delivered	Main	0	0	0	0
	Top up	3.2	0	0	0
Home Help	Main	0	3	3	0
	Top up	0	0	0	0

7.5.3 Distance Travelled for Shopping Purpose

The distance travelled for a 'main' shop appears to be further than for a 'top up' shop (Table 16). Less than 1 mile was travelled for 25.5% of 'main' shopping occasions while 43.2% of 'top up' shops required a travelling distance of less than 1 mile, 2.4% of this taking place at the home. A distance of between 1.1-5 miles was travelled for 29.6% of 'top up' shops and 14.7% of 'main' shops. Over 20.1 miles were travelled for over a quarter (29.4%) of main shopping occasions but only 10.4% of 'top up' shops.

Irrespective of the distance required to carry out a main shop the car is the most common mode of transport with none of the participants walking to the store for their main shopping (Table 7.7).

Counter to the Countryside Agency's (2001) estimate that 80% of rural households live within 4 km (i.e. 2-3 miles) of a supermarket, McEachern and Warnaby, 2005 indicates that 13% of rural respondents travelled between six and 10 miles and 23% travel more than 11 miles to do their main food shopping. Of those 27% of respondents travelling less than a mile to carry out their main shopping, the majority (i.e. 87%) originated from an urban location. (McEachern and Warnaby, 2005). However, this study finds those living in this remote area travel further to carry out their main food shopping with 60.8% travelling in excess of 5.1 miles and 29.4% travelling over 20.1 miles to carry out the households main food shopping.

7.5.4 North/ South Comparison of Distance travelled for Shopping Purpose

Table 7.8 – Participants (%) travelling distances (miles) for Shopping Purpose

Distance	0	< 1	1.1-5	5.1-10	>20
North					
Main	0	6.7	6.7	26.7	60
Top up	5.8	44.2	25	7.7	17.3
South					
Main	0	40	20	35	5
Top up	0	38.4	32.9	23.3	5.5

Main shopping occasions with a travelling distance of less than one mile accounted for 40% of all ‘main’ shopping occasions in the Southern Western Isles but only 6.1% in the North. 60% of ‘main’ shopping occasions in the North required a travelling distance in excess of 20.1 miles. Only 5% of ‘main’ shops in the South required a travelling distance of over 20.1 miles and 85% had a travelling distance of less than 10 miles (Table 7.8).

This suggests those in the South have better physical access to stores with shorter distances to travel to stores. However, stores available in the South are smaller and the area includes Barra, which is a small isolated island only accessible by ferry. There are fewer supermarkets in the Northern isles but they do have the largest floor size (Greater than 15,000 sq ft of selling area).

Excluding home delivery 73.1% of ‘top up’ shopping in the Northern Western Isles required less than 5 miles travelling distance with 17.3% of ‘top up’ shopping requiring a travelling distance in excess of 20.1 miles. 86.3% of ‘top up’ shopping had a travel distance of less than 10 miles in the South with 71.2% of these being less than 5 miles (Table 7.8).

7.5.5 Travel Time

For all shopping occasions recorded 52.1% had a travel time of less than 5 minutes. 24.7% had a travel time of between 5-15 minutes, 11.3% between 15-20 minutes and 11.9% took a travel time of over 30 minutes. The maximum travel time taken was 65 minutes and the mean 12.6 minutes.

Table 7.9 – North/ South comparison of travel time to store

Travel Time (mins)	North (% of trips)	South (% of trips)
0	0	0
1-5	54	50
6-15	16	32
16-30	11	11
>30	18	6

7.5.6 Comparison of Travel time in North and South

The maximum time travelled for a shopping occasion in the North was 60 minutes and in the South 65 minutes. The minimum time travelled was 0 minutes (home deliveries) in the North and 1 minute in the South. The mean time travelled in the North was 14 minutes and in the South 11 minutes. It is important to consider travel times, and not merely distances travelled, in this area as many of the roads are single track.

7.6 Shopping Spend

The maximum spend in a single shopping trip for all shopping occasions recorded was £142.88 with a mean spend of £20.89 (Std. Deviation 25.27). The average spend per household over the 7 day period recorded was £98.85. However, three of the households appear to have spent a particularly high amount during this period and which may not be in line with their normal spending pattern. For example one

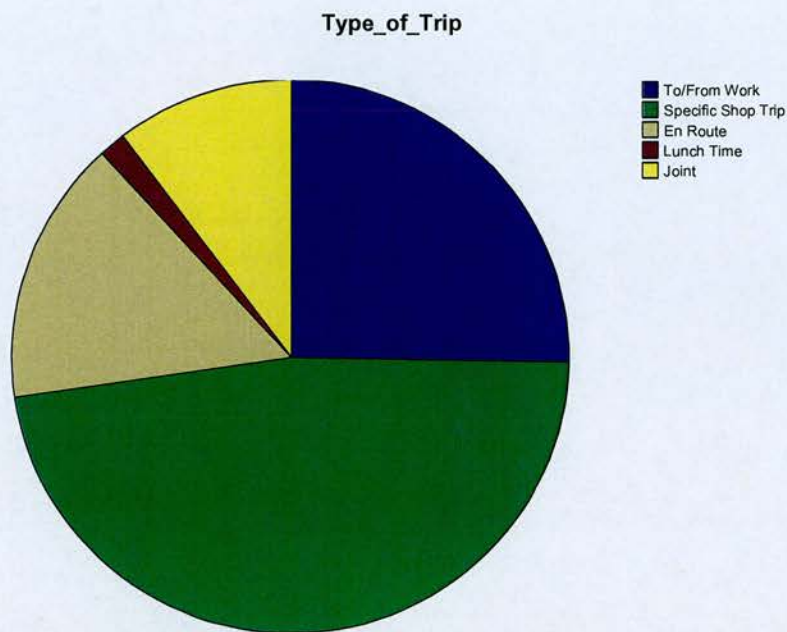
couple were having three teenage grandchildren to stay for the week therefore purchasing more than normal. For this reason these three participants were removed from this calculation leaving an average spend per household of £87.27. This is over double average weekly spend on food in Scotland was £41.70 as found in the 2001/2002 family spending report (ONS, 2002)

7.7% of shopping occasions cost £0.00, this percentage includes food caught/ grown or gifted but also items which are on account and paid for on a weekly basis. When shopping occasions with no cost are excluded 22.7% cost less than £5.00 and 42.3% cost less than £10.00. 88.1% of all shopping occasions cost under £50.00 with 11.9% costing over £50.00.

7.7 Joint Trip Shopping

Of all shopping occasions recorded, 47.4% of these trips were made specifically to carry out food shopping. A total of 26.8% of shopping trips were tied in with the working day, 25.3% on the way to or from work and 1.5% took place during lunch break. 15.5% of all shopping occasions were carried out on route to/ from somewhere else (i.e. friends house/ activity) and 10.3% were part of a joint purpose trip where other 'tasks' were carried out in the same trip i.e. banking.

Figure 7.4 – Type of shopping trip



7.8 Conclusions

Analysis of the shopping diaries found the main differences in shopping behaviour occurred between those living in the north and the south of the Western Isles. There were no real differences between age groups or employment status. The main difference related to how participants used the stores available to them. Participants were more inclined to carry out one larger shop and a few smaller top up shops during the 7 day dairy period whereas those in the south were more likely to carry out 3 equal sized shops throughout the week. In interviews participants stated this was influenced by the store delivery schedules and the availability of produce in store. Participants in the North are more likely to use specialist suppliers such as the butcher or fishmonger which are more readily available in the North.

CHAPTER EIGHT

CUPBOARD SURVEY

8.1 Introduction

The cupboard survey was designed to capture data in domestic stocks of healthy foods. It was based on the 35 item Healthy Eating Indicator Shopping Basket (HEISB) used to assess availability of healthier items in stores (Anderson et al, 2007; Dawson et al, 2008) and allowed a direct comparison between what was available in stores (in 2005/06) (Shown in tables as in store column) and what was stocked in the participants homes. The cupboard survey was carried out to assess availability of these 35 food items in the home. All participants interviewed agreed to have the cupboard survey carried out in their homes (n=56). The chapter looks at distinct stock by product category.

8.2 Fruit stocked in the home

Table 8.1 – Fruit stocked in the home

FRUIT (n=52)	In Stock	Out of Stock	Substitute	Never Buy	Home Grown	In Store
Apples	76.8	16.1	1.8	5.4	-	70.0
Bananas	64.3	28.6	-	7.1	-	70.0
Grapes	33.9	46.4	-	19.6	-	36.7
Oranges	53.6	17.9	8.9	19.6	-	70.0
Orange Juice	66.1	5.4	-	28.6	-	75.0
Pineapple	44.6	14.3	-	41.1	-	68.3
Frozen Berries	5.4	5.4	3.6	78.6	7.1	30.0

Generally, participants had a good stock of the fruit items, in the HEISB, in their homes at the time of the cupboard survey. Participants were regarded as purchasing goods regularly if they had them in stock, were out of stock at time of interview but usually purchased or had a substitute (i.e. different pack size) in the home. Table 8.1 shows most participants purchased apples (94.6%), bananas (92.9%) and orange juice (71.4%) regularly and had adequate access to these products as they were commonly stocked in stores throughout the western isles (apples and bananas in 70% of stores and orange juice, 75% (Dawson et al, 2008)).

One item which was not so well stocked in the home was grapes. Although 80.4% of participants reported purchasing grapes regularly only 33.9% had them in stock at time of interview. Several reasons were given for grapes being out of stock in the home and these included poor quality and availability in store. This variable availability reported in store was confirmed by the retail survey which showed only 36.7% of stores in the western isles to have white grapes in store at time of survey. Grapes were also thought to be expensive and regarded as a more luxury item and bought less frequently than some other fruits such as apples and bananas, largely due to price.

8.3 Vegetables stocked in the home

Table 8.2 - Vegetables Stocked in the Home (*fresh)

VEGETABLES (n=52)	In Stock	Out of Stock	Substitute	Never Buy	Home Grown	In Store
*Broccoli	35.7	37.5	7.1	16.1	3.6	43.3
Baked Beans	66.1	8.9	8.9	16.1	-	80.0
*Pepper	46.4	21.4	3.6	28.6	-	45.0
*Carrots	66.1	10.7	1.8	3.6	17.9	71.7
*Onions	80.4	5.4	-	-	14.3	73.3
Sweetcorn	19.6	3.6	3.6	73.2	-	20.0
*Lettuce	7.1	26.8	12.5	50.0	3.6	40.0
*Cucumber	39.3	17.9	-	41.1	1.8	40.0
Frozen Peas	53.6	10.7	-	35.7	-	58.3
*Tomatoes	78.6	12.5	-	7.1	1.8	58.3

Several items in the vegetable group were frequently available within the home such as onions (94.7%), carrots (85.8%) and tomatoes (80.4%). While these items were found to be available in a large percentage of stores, interviews revealed this availability was sometimes inconsistent and quality poor. In response to this some participants grew their own vegetables or received home grown vegetables from friends or family.

Of the 7 fresh vegetable items in the HEISB all of these were reported, in interviews, as being produced by some of the participants at certain times of the year. The cupboard survey showed that home grown vegetables were available in the home for six out of these seven items, with the exception of peppers (Table 8.2). Cupboard surveys took place in March and October therefore some home grown vegetables were out of season therefore the number of those with home grown produce available in the home would vary throughout the year. Despite this carrots and onions were the most commonly available home grown vegetables at time of survey, with 17.9%

of participants having home grown carrots and 14.3% onions in the home (Table 8.2). Onions were stored fresh and carrots were often left in the ground and harvested fresh for a meal or stored in sand boxes.

Table 8.2 shows a number of the vegetable items were not well stocked in the home, such as lettuce (7.1%), cucumber (39.3%) and broccoli (35.7%). The time of data collection may have contributed to the low availability of salad vegetables such as lettuce and cucumber. However, the retail survey carried out the year previous at a similar time of year, broccoli was stocked in only 43.3% of stores in the western isles (Dawson et al, 2008). Assuming stocking levels were similar stock this may have contributed to the fact only 35.7% of participants had fresh broccoli in the home at time of interview, despite 83.9% reportedly having it regularly in stock.

The sweetcorn product specified in the survey was tinned and a low sugar, low salt variety. The table above shows that although 26.8% report having this variety available regularly only 19.6% did so at time of interview and 73.2% reported never buying this type of product. Some participants said they had tried this product in the past but had not liked the taste however, availability of low sugar, low salt sweetcorn in stores was shown to be limited in the retail survey and only stocked in 20% of stores in the western isles (Dawson et al, 2008).

Storable vegetable items such as frozen peas and canned baked beans were found to be in stock in a large percentage of homes (baked beans 75% and frozen peas 53.6%). Participants reported having frozen vegetables such as frozen peas in the home as a stand by vegetable for when they have no fresh available.

8.4 Carbohydrates in the home

Table 8.3 - Carbohydrates Stocked in the Home

CARBOHYDRATES (n=52)	In Stock	Out of Stock	Substitute	Never Buy	Home Grown	In Store
Brown Rolls	14.3	8.9	1.8	73.2	1.8	38.3
Weetabix	44.6	1.8	-	53.6	-	63.3
Spaghetti	78.6	3.6	3.6	14.3	-	73.3
White Rice	71.4	5.4	10.7	12.5	-	70.0
Oven Chips	51.8	3.6	-	44.6	-	61.7
Porridge Oats	78.6	1.8	10.7	8.9	-	71.7
Potatoes	75	3.6	1.8	1.8	17.9	73.3
Brown Rice	32.1	1.8	-	66.1	-	23.3
Wholemeal Bread	48.2	3.6	-	42.9	5.4	55.0

Many items in this food group are non-perishable and as such were found to be widely available in a large percentage of homes. Items such as spaghetti (78.6%), porridge (78.6%) and white rice (71.4%) were commonly stocked in the home (Table 8.3). Participants reported keeping a well stocked store cupboard in order to be able to make a meal if they were unable to access the stores for some reason or if the stores food delivery was delayed for any reason.

Brown rice was less commonly available (32.1%) than white rice (71.4%) in these households and 66.1% reported never purchasing it. Some participants commented on the lack of availability of brown rice and pulses during interviews. Although a number of stores were found to stock white rice (70%), availability of brown rice was shown to be more limited with only 23.3% of stores stocking it at time of survey (Dawson et al, 2008).

The availability of fresh products in this category was variable. While potatoes and wholemeal bread were reasonably well stocked within the home (potatoes, 75% and

wholemeal bread, 53.6%), only 14.3% stocked wholemeal rolls. Several participants commented that the availability of brown rolls was limited in stores, which was confirmed in the retail survey, which showed them to be available in only 38.3% of stores (Dawson et al, 2008).

Potatoes were the most regularly available product in this food group with 98.2% of those interviewed regularly having potatoes for consumption in their homes (In stock + out of stock + substitute + home grown). Three quarters of those surveyed had them in stock at time of interview with a further 17.9% having home grown, either their own or given as a gift by family/friends or neighbours. Interviews were carried out in October and April which could affect the percentage stocking home produced potatoes. Some participants interviewed in April had finished the supply so it could be expected that the percentage of those consuming home grown potatoes would vary throughout the year.

Oven chips were stocked in just over half of all households (51.8%) however, 44.6% of participants never buy oven chips. While these are regarded as a healthier alternative to fried chips one participant reported deep frying oven chips.

8.5 Meals stocked in the home

Table 8.4 - Meals Stocked in the Home

MEALS (n=52)	In Stock	Out of Stock	Substitute	Never Buy	Home Grown	In Store
Birds Eye Lasagne	-	1.8	-	98.2	-	46.7

The Bird’s Eye Lasagne meal was not available in any of the households at time of interview and 98.2% never buy this product. Participants did not express a desire to purchase this product with many preferring to make the same meal themselves from

basic ingredients. This meal was available in only 46.7% of stores in the Western Isles (Dawson et al, 2008).

8.6 Protein stocked in the home

Table 8.5 - Protein Stocked in the Home

PROTEIN (n=52)	In Stock	Out of Stock	Substitute	Never Buy	Home Grown	In Store
Lean Beef Mince	30.4	32.1	17.9	8.9	10.7	40.0
Chicken Breasts	42.9	21.4	23.2	12.5	-	41.7
Haddock Fillets	8.9	26.8	8.9	46.4	8.9	58.3
Salmon Fillets	12.5	19.6	5.4	48.22	14.3	15.0

Lean mince (65.9%) and chicken breasts (87.5%) were regularly stocked in the home. These products were often bought fresh and frozen for storage in the home and were recorded as substitute products. Some participants had their own animals and 10.7% of the mince available had been produced from cattle reared at home for home kill. Only 8.9% of households never bought lean mince and 12.5% never purchased chicken breasts despite only being available in 40% and 41.7% of stores respectively (Dawson et al, 2008). Therefore the lack of availability in store did not appear to prevent participants from purchasing this product, perhaps choosing to stock up during the ‘main shop’ in a larger store where these items were available.

Of the 53.6% of those interviewed who regularly have haddock fillets in stock 8.9% of those obtained it by catching it themselves or received it as a gift from friends/ family or neighbour. 50% of the haddock in stock, at time of interview, was obtained by means other than from a shop/ fish van. Of the 51.8% of those interviewed regularly having salmon fillets in stock, 14.3% obtained it by catching it themselves or received it as a gift from friends/ family or neighbours. i.e. 27% of those who regularly stocked salmon obtained it by means other than purchasing from

a shop or fish van. Just over half of those who had salmon in stock had obtained it by means other than from a shop/ fish van. Participants without access to fish from alternative sources, such as fishermen in household or gifted, reported difficulties purchasing this product in conventional stores. Haddock and salmon fillets were available in 58.3% and 15% of stores respectively (Dawson et al, 2008) and this lack of availability in store appeared to limit the consumption of this product for those who could not access it through other supply routes.

8.7 Dairy stocked in the home

Table 8.6 - Dairy Stocked in the Home

DAIRY (n=52)	In Stock	Out of Stock	Substitute	Never Buy	Home Grown	In Store
Skimmed Milk	1.8	-	7.1	91.1	-	31.7
Semi Skim Milk	35.7	-	39.3	25	-	75.0
Low Fat Yoghurt	55.4	8.9	1.8	33.9	-	53.3
Low Fat Spread	21.4	-	1.8	76.8	-	36.7

Semi skimmed milk was regularly available in stores (75%, Dawson et al, 2008) and households (75%, figure 18) with 25% reportedly never buying fresh semi skimmed milk. The 39.3% of semi skimmed substitute product represented different sizes of milk carton (a 1 litre carton was chosen as standard for the HEISB). However, skimmed milk was not generally stocked with only one household having skimmed milk available at time of interview and 91.1% never purchasing this product. The remaining 7.1% had long life skimmed milk available (substitute product) as fresh skimmed milk was reportedly not available in the shops (available in 31.7% of

stores, Dawson et al (2008)) or was only kept in the home as a stand by for emergencies.

Low fat spread was only available in 36.7% of stores (Dawson et al, 2008) and only 21.4% of households regularly purchased low fat spread and 76.8% never buy this product. Butter was frequently mentioned as the preferred choice as it is perceived as a 'purer product' which is less tampered with and tastes better.

8.8 Conclusions

Cupboard surveys have shown how participants store products in the home and the prominence of food items within the home that were obtained from sources other than through conventional retail networks. In interviews participants reported keeping a good stock of dried and frozen products in the home for times when they were not able to get to the stores or when deliveries were delayed. This is confirmed by the cupboard surveys as they show a large proportion of participants had dried goods such as pasta and rice in the home and also meat products such as chicken and mince bought fresh but stored frozen in the home.

Cupboard surveys also highlight the extent to which participants produced their own meat and vegetables or sourced products from alternative food networks. The product for which this had the most importance is fish. Fish is interesting because it was one of the items less available in stores (Dawson et al, 2008) however, cupboard surveys suggest this not representative of consumption within the area as they show participants had a reasonable stock of fish within their homes which had been obtained direct from fishermen or caught by family or friends.

CHAPTER NINE

FOOD FREQUENCY QUESTIONNAIRES

9.1 Introduction

Food frequency questionnaires were used to give some indication of participants' food consumption in order to compare them with recommended intakes. Although the sample size in the study is not large enough for full analysis of the food frequency questionnaires they can be used to give a picture of participants' diets in the study.

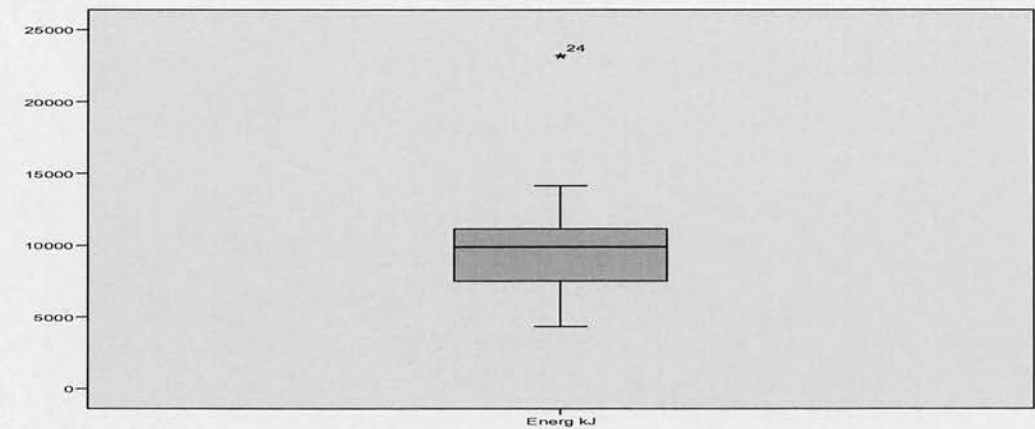
9.2 Findings

In order to fully explore the aims of this study participants selected within each household were the main food shopper. Therefore the sample was not equally split by gender or age groups therefore the FFQ's were analysed as a whole group ($n = 45$). The decision to analysis the group as a whole was taken to give a broad indication of the consumption patterns of the sample. The sample would also be too small for analysis purposes to split into age and gender groups.

Initial descriptive statistics showed the nutrient intakes of the sample to be within a normal range. However, exploring the spread of the data for energy intake of the sample using a box plot shows one extreme outlier¹¹ (Figure 9.1). A decision to exclude this participant from further FFQ analysis was taken as this excessively high energy intake indicated over reporting ($n=44$).

¹¹ This participant reported an excessively high energy intake of 23,173kj, which is out with the acceptable range of the group, which had a mean energy intake of 9755.7kj and a St.d of 3151.5kj.

Figure 9.1 – Box plot of samples nutrient intakes



Mean values were calculated for the main nutrient groups; protein, carbohydrate, fat and total energy. This initial analysis shows the data collected in the food frequency questionnaires lies within normal parameters and can be used for further analysis. Normal parameters for each nutrient group and the samples results are discussed within the chapter.

Table 9.1 – Sample (n=44) mean intake for each nutrient group

	Protein (g)	Fat (g)	CHO (g)	Energy (kj)
Mean	98	92	268	9450
Median	97	100	268	9874
Std. Deviation	29	28	75	2425
Minimum	39	39	135	4349
Maximum	156	146	402	14157

9.3 Protein

Participants in this study reported consuming a mean of 97.6g of protein each day, which contributes 17.9% of food energy for this group. This is slightly higher than

average levels in the British diet where daily intake is 88g for men and 64g for women, providing about 16% of energy (British Nutrition Foundation, 2004). However, both national levels and that of participants in this study are higher than recommended reference nutrient intakes which are 45g per day for women aged 19-50 years and 55.5g per day for men aged 19-50 years (DoH, 1996).

This high protein intake indicates that participants are likely to be consuming large amounts of meat, fish, eggs and dairy produce, all of which are high in fat and in particular saturated fat. A high fat intake, and in particular a high intake of saturated fatty acids (saturates), has been associated with a raised blood cholesterol level, which is one of the risk factors for coronary heart disease (British Nutrition Foundation, 2004).

9.4 Fat

The Scottish Diet Action Plan (Scottish Office, 1996) recommended that fat should provide no more than 35% of total energy. Mean intakes of fat for participants in this study were 92.3g, which is 36% of the mean energy. This value is close to the recommended levels although still high. The National Diet and Nutrition Survey (NDNS - Henderson et al, 2003) showed that in 2000/2001 average daily intakes of fat were 87g for men and 62g for women, providing around 36% and 35% of food energy in the diet, respectively. While the NDNS data indicate that the average UK intake for fat is also close to the recommendation, it also shows that many people in the sample eat more saturates than recommended (average intakes of saturates were 13% of food energy). Participants in this study had reported consumption of 36.52g of saturated fat per person which contributes 14.3% to total energy, much higher than the recommended 11%.

It is likely that this high intake of saturated fat can be attributed to high intakes of meat, fish, eggs and dairy produce which may have negative health implications as high consumption of saturated fats are linked to coronary heart disease, diabetes and some cancers (WHO, 2003)

9.5 Carbohydrate

The SDAP (Scottish Office, 1996) recommended carbohydrate intakes were increased by 25% from 124 grams per day and dietary reference values for carbohydrate is 50% total energy intake. The NDNS (Henderson et al, 2003) found carbohydrates contributed 47.7% total energy intake for men and 48.5% energy intake for women. Table 9.1 shows mean intakes of carbohydrate to be 267.577g per day, which is 45 % of energy intake. This level is slightly lower than the general population and below recommended intakes.

Some carbohydrate rich foods such as certain fruits and cereals e.g. oats may slightly reduce the level of cholesterol in the blood and a high blood cholesterol level is associated with an increased risk of cardiovascular disease (British Nutrition Foundation, 2004). As levels are lower than recommended participants may have an increased risk of cardiovascular disease.

9.6 Fruit and Vegetables

It is well documented that eating an unhealthy diet and low fruit and vegetable consumption in particular is a key factor in chronic diseases. The World Health Organisation recommends eating at least 5 portions of fruit and vegetables each day for optimum health (2003). The National Diet and Nutrition Survey (Henderson et al, 2003) found men ate an average of 2.7 portions of fruit and vegetables each day and women 2.9 portions, falling well below recommended intakes. Participants in this study reported eating 1.1 portions of vegetables each per day and 2.7 portions of fruit per person per day. This total of 3.8 portions of fruit and vegetables, although below the recommended 5 portions per day, is higher than found in the National Diet and Nutrition Survey (Henderson et al, 2003).

The LIDNS (FSA, 2007) found older adults (50-64 and over 65) consumed significantly more portions of fruit and vegetables per day (2.7-2.9) than those in

younger age groups ((2.0-2.2). There was an increase in fruit and vegetable consumption with age in the LIDNS which if present within participants in this study could have increased the average intake as 50% of participant were aged 50 plus and a further 32% aged between 36 and 49 years.

From this it appears these participants may have a higher fruit and vegetable intake than the general UK population. Having reported difficulties in accessing good quality fruit and vegetables this may be unexpected. However, several participants reported growing their own vegetables to increase availability and increased consumption of vegetables at time of harvest. Participants also reported cooking from scratch using fresh vegetables, as there was a lack of convenience meals and take away facilities in many areas. These factors may have contributed to the higher than average fruit and vegetable consumption however, participants still only reported consuming 1.1 portions of fruit and vegetables each per day.

9.7 Fish

The Food Standards Agency (2004) recommends everyone should eat two portions of fish a week, including one portion of oily fish. Participants reported an average consumption of 1.7 portions of white fish per person per week, including that cooked in batter. If white fish cooked in batter is removed then this falls to 0.9 portions per week and reported consumption of oily fish was slightly higher at 1.3 portions per week. These levels are in line with recommendations and above the national average of 0.74 portions of white fish and 0.36 portions of oily fish.

Living in an island location it could be expected those living in the Western Isles would have more access to fish than those on the mainland. However, although interviews revealed some participants had good access to fish many reported difficulties accessing fresh fish. Those who had good access to fresh fish most commonly received it through family, friends or direct from fishermen rather than purchasing it from stores. Oily fish such as mackerel is a traditional food for the area with some participants catching their own, sometimes in large quantities which is shared among family, friends and neighbours.

9.8 Conclusions

Food frequency questionnaire results suggest participants consume more fresh fruit, vegetables and fish than the general population however; they also consume less carbohydrate, more protein and saturated fat. Results suggest meals are not bulked up with carbohydrate with some participants' diets heavily reliant on meat, eggs and dairy products and this was a sentiment corroborated by interviews and cupboard surveys. Meat played a central role in the meal and particularly so for those producing their own, receiving meat as gifts or buying in bulk direct from producers.

Perceptions of low fat products and their association with healthy eating varied among participants. Although semi skimmed milk and low fat spread was widely available within stores in the Western Isles (Dawson et al, 2008) participants reported being less willing to purchase and consume low fat products. Semi skimmed milk was accepted and widely used by participants and in stock within 75% of participants homes at time of interview however, skimmed milk was only available in 9% of households and 77% of participants reported never buying low fat spread (Cupboard survey, chapter 8). Participants preferred the taste of full fat products with many regarding products such as butter to be 'purer' and 'less tampered with' therefore better for health. These perceptions of low fat products could explain the above average consumption of fat shown in table 9.1.

Results show the group to have similar intakes to the general UK population with some a little higher i.e. fat/ fruit and vegetable/ fish consumption and others lower i.e. carbohydrate intakes. The food frequency questionnaire used was a relatively long format with a list of 170 foods and drinks with sections on both portions and frequency. It has been shown that larger more detailed food frequency questionnaires yield more consumption data, i.e. more boxes to tick or an open response for times per week gives more complete or even exaggerated reporting (Krebs-Smith et al, 1995; Cavert et al, 1997). However, results from these food frequency questionnaires provide a quantitative 'snapshot' and can be used to

represent the participants' food consumption as intakes fall within normal parameters.

CHAPTER 10

CONCLUSIONS

10.1 Introduction

This thesis has focused on consumers living in remote island communities in the Western Isles of Scotland and looked at how they adapt their food shopping to the challenges of living in a remote geographical location. It has shown how these experiences shape their expectations and perceptions of food access and the creative ways in which they manage the food procurement options available to them. This chapter draws together the main findings in terms of perceptions and difficulties consumers highlighted during the study to reflect on food provisioning in general and remote communities in particular. Finally the chapter discusses the limitations of the research and proposes areas for future research.

10.2 Retail Provision

Participants' perceptions of retail provision in the Western isles were generally favourable despite the limited choice of stores available. The number of stores was limited particularly in the south, as the variety of store types was restricted, mainly to small retail stores, with relatively few large retail groups present on the islands. Overall choice of store to carry out food shopping was limited. A report by the Competition Commission (2007) suggests the structure of consumer society is changing leading to an increased demand for a more varied retail structure. However, in areas of the Western Isles, such as Sollas, there is only one store available locally and so no choice of store. In a number of cases these local stores provide a good service and a range of good quality produce for their customers. In general participants were content with their local provision. Participants seem satisfied with one store, expressing no need or desire for other store options, however what is stocked in store is important to ensure adequate provision. However in other areas e.g. Lochmaddy in North Uist, this lack of choice leaves

some frustrated with the lack of options available to them and they believe the lack of competition allows stores to become complacent and provide a sub standard service.

Remote consumers appear to have lower expectations of retail choices due to the geographical areas in which they live and the difficulties retailers face with a limited customer base. Where participants were unhappy with the retail provision it was more commonly due to poor management of the stores rather than the size or location of the store per se. Participants using similar size stores in other areas were happy with the provision and service provided suggesting that irrespective of store size store good store management can ensure a suitable service can be provided. One example of this was the store in Benbecula where the storeowner had worked hard to ensure a supply of good quality fruit and vegetables were available for his customers.

One of the problems participants experienced with the smaller format stores was the limited range of products which stores were able to stock. For the chain stores this appears to be restricted by store size and controlled by a central distribution centre on the mainland. By control being on the mainland with decisions made more applicable to the mainland where a range of stores are available to consumers, this is perhaps too detached from the needs of those living in remote locations where other larger format stores are not available. For stores in remote locations perhaps an exception could be made allowing more consultation and input regarding store 'plans' from store managers, in order to better serve remote communities allowing smaller amounts to be ordered in order to provide a wider range to be stocked and some items normally restricted to larger format stores made available to the smaller stores on the islands.

The choice of stores available varied between areas and the largest store was situated in Stornoway on Lewis in the North. For those able to access this store, perceptions of retail provision was generally favourable irrespective of the travelling distance required to access this store and participants in this study were prepared to travel up

to 36 miles to do their food shopping. While this suggests the introduction of a large format store would improve retail provision in an area such as this however, it is unlikely the population would be large enough to support such a store in many remote areas. The introduction of such a store would also have implications for the smaller retailers who may lose customers, which would in turn reduce the produce they could stock. Those who could not travel to the larger store might have even less choices, as the smaller stores struggle to compete. A more favourable option would be to improve the provision in the stores available through store management, which would increase competition between stores fostering further improvement in store service.

Participants in the study had a very positive perception of community co-ops and felt they provided a good range and quality of produce as well as a friendly and reliable service. This store format offered a welcome alternative particularly where local stores were struggling to provide a good service. In a number of cases local consumers were in favour of these becoming community co-ops. If this format could be replicated in some of the local stores retail provision might be improved in these areas and could encourage and promote a positive sense of community, which is particularly important in rural and remote areas (Smith and Sparks, 2000). Community Food Co-ops appear to be more flexible in their ordering than some of the larger supermarket groups and able to provide a more personal service.

Previous research in the Southern Western Isles found island consumers 'were dissatisfied with the food provision infrastructure on the Southern Isles' (Clark et al, 1996). This dissatisfaction arose from problems of irregular supply patterns, poor quality fruit and vegetables and 'no scope for spontaneity in food shopping' (Skerrat, 1999). Although some participants in this study reported similar problems in areas of the south such as South Uist and Barra, this was not the view of the majority of participants. There was more dissatisfaction expressed by those in the Southern Isles in comparison to participants in the North. Where there seems to be some improvement in food retail provision in the South a number of stores continue to provide what consumers regard as a sub standard food provision. Participants report

some improvement in stores in the south due to changes in management of stores and more consistent supplies in store. This allows consumers to be more confident in store supplies however a number of participants remain sceptical about the provision and service offered by stores and their perceptions of retail provision remain poor. Consumers' perceptions of food retail provision in this research support previous suggestions of disparities in provision within rural communities (McKie et al, 1996; Furey et al, 2001). However, a number of islanders have devised ways to overcome these disparities that utilise alternative food networks and draw on household and community networks to increase their choice.

10.3 Access

There is as yet no agreed definition of what constitutes adequate access. For participants in these remote communities adequate access means being able travel to a store, even if this means travelling a relatively long distance, which has a consistent range of produce providing choice, variety and quality at all times. Aspects of this definition applicable to remote consumers, which may differ from one relating to factors important to urban consumers are the distance to store, consistent supply and number of stores required. Participants in the north had access to the large supermarket in Stornoway providing a variety of good quality products and were generally prepared to travel the long distances to access this store because of the choice available in store. Remote consumers accept they may have to travel to a food store due to the location in which they live and this is the trade off for living in safe communities with scenic countryside. There was no need expressed for a choice of stores providing the one store provided all the good quality produce they required although some chose specialist stores for certain products such as meat and fish. Inconsistent supply and poor quality produce are the aspects of remote food shopping consumers find most difficult to accept and as such this must be included in a definition of adequate access for remote consumers.

In terms of physical access to stores most participants were able to get to a food store, despite having to travel relatively long distances to do so. Most participants

had access to a car for food shopping and for those without a car, social networks such as friends and family were important for many providing lifts and enabling them to access stores. In many instances supportive communities provided these social networks as part of the island culture. These social networks were particularly important for the elderly population who did not own a car.

Those using the voluntary organisation run shopping bus service found this service particularly useful. At present it only operates in the south but should this shopping bus service be replicated in other areas it could improve access to the larger stores and hence food choice, purchase and consumption for the elderly. For consumers who are reliant on the home help service to carry out food shopping a shopping bus could free up home helps for other work. These services enable elderly consumers to maintain some independence and provide an opportunity for social interaction, which can add to self-esteem and mental health. A shopping bus would be an invaluable service for those consumers who are restricted by personal mobility and the feasibility of such a service should be explored by councils who serve remote and rural areas.

Whelan et al (2003) in their research into food access in an urban area suggested that accessibility is a relative concept as when living in an area where everyone has poor access consumers learn to adapt to the circumstances to the point where it is not recognised as a problem. This same argument could be applied to this remote area where 22% of all consumers must travel an average distance in excess of 25 km to reach a medium or large store (Direct line distance, not road distance, Dawson et al, 2008) but where participants were generally satisfied with the store provision available. Participants accepted this as part of living in such a remote location and found ways in which to adapt and cope with their situation.

Despite a wealth of discussion on the impact of food access on consumer food choice in policy (New Policy Institute, 2000; SDAP, 1996; Scottish Government, 2009) and academia (O'Neil, 2005; White, 2007; Wrigley et al, 2002), research to date has failed to support these suggestions (Cummins and Macintyre, 2002a). Again, this

study found that although there were difficulties and frustrations with the retail environment, particularly for the elderly and low income groups, participants managed to adapt and implement solutions.

In terms of food access there is no generic solution as there is great variety in problems and these relate to individual circumstances as well as the retail provision available.

10.4 Availability

The term availability is often used interchangeably with the term access or accessibility in the context of the food access debate. For remote consumers availability is discussed in terms of the number and type of stores present in an area and the consistent availability of produce in stock within the stores. The number and type of stores is not as important to remote consumers as what is available in store.

Store choice decisions are largely based on convenience although this has different meanings for different consumers. Convenience is again a relative concept for the remote consumer and it depends on what is available in store, which directly shapes consumers perceptions of what is “convenient”. For example stores may be convenient because of where they are located but this is dependent on their having a good range of produce, or being open at a convenient time. For some consumers, convenience is also linked to personal circumstances such as the location of the store in relation to their place of work but inevitably it is related to what is available when they go shopping.

This issue of availability in store is of key importance as deliveries arrive only three times per week and a number of the stores are too small to stock and display large volumes of goods. Inconsistent availability of products in store was one of the most frustrating aspects of shopping in the Western Isles, which made planning and budgeting difficult, particularly in regards to fresh produce.

In some of the more remote areas of the Western Isles, such as Berneray in the south and Great Bernera in the north, participants reported poor availability of good quality fresh produce in the small independent stores. As a consequence participants purchasing fewer or no fresh fruit and vegetables between 'main' shopping trips to larger stores further from home. Improving the availability and quality of fresh fruit and vegetables in these stores may increase the amount purchased and consequently consumed. These small independent stores often have limited display and storage areas in store and lack the finance to support large purchases of perishable goods. To overcome these limitations stores could organise an ordering system for fresh products such as fruit, vegetables similar to that used for meat in one of the small independent stores. In this way small retailers can increase their income and good quality fresh produce becomes available on a regular basis for the consumer. In order for this system to work good links must be established between the retailer and the consumer. In small remote and rural communities the familiarity between retailer and consumer should facilitate the establishment of relationships based on trust. To ensure good quality produce is supplied retailers must also establish good working relationships with suppliers either locally or on the mainland.

Another key aspect of availability is that of providing choice to the consumer. It has been suggested that consumers must have a genuine choice to promote well-being and self esteem (Clarke et al, 2004). Where consumers felt they had a choice of products, often local produce, which allowed them to make decisions based on price and quality as well as ethical choices such as organic and fair traded goods this promoted a more positive shopping experience. Although these choices are not essential they increase consumer satisfaction with retail provision and ensure they feel they are taking part in society as some consumers living in remote areas can feel marginalized due to their geographical location (McKie et al, 1998).

10.5 Food Shopping

Household food shopping is mainly the responsibility of the female in the household and many of the female participants were employed out with the home. This

imposes further restrictions on the time available for food shopping particularly limiting when the availability of stock is closely linked to delivery schedules and store opening times. For those working shifts this can be particularly difficult as store opening times in this area were found to be the most limited in comparison to other areas in Scotland (Dawson et al, 2008).

Jackson and Holbrook (1995) identified shopping as a source of pleasure or anxiety. These remote consumers generally felt food shopping was associated with anxiety and derived no pleasure from the food shopping experience. In certain stores the very small aisles means they were unable to take time and browse to look at new products. Clarke et al (2004) found shopping was as much about looking as purchasing and this is a finding consistent with this study as participants enjoyed the more relaxed atmosphere of local produce sales and the space available in larger stores. Spatial restrictions imposed by the small stores impede the food selection process with participants choosing to purchase the same repertoire of goods on a regular basis disregarding other options and in store advertising. A more relaxed approach to shopping was reported at produce sales and larger stores and participants were more likely to experiment and try new products within this environment.

10.6 Alternative Food Networks

One of the main themes arising from the analysis was the many and varied coping mechanisms and use of alternative food networks to manage access to a wide range of produce and increase the choice, freshness and quality available. Strategies such as hording, bulk buying and frequent shopping trips have been identified in previous research (Furey et al, 2001; McKie et al, 1998; Skerrat and McKie, 1997; Wilson et al, 2004) and these were also identified by this study. The reasons given for utilising these strategies include to aid management of the household food budget and to overcome variable supply and quality issues.

Alternative food networks such as local produce sales, farmers markets and home produced food were used in conjunction with the conventional food retail supply

chain in order to meet the needs of participants. Use of alternative supply networks are commonly termed alternative food networks although, as is the case in this study, they are often used in conjunction with conventional food retail supply so could be more accurately termed complementary food networks. Products sourced from alternative suppliers were mainly fresh produce such as eggs, meat, fish and vegetables. The extent to which these networks are used and relied upon is often dependant on the retail provision available in the area in which participants lived. Many consumers use a variety of mechanisms and strategies to adapt to the unreliable food supply that they associate with the retail food system, for example growing their own vegetables and using food for barter. In this way food becomes embedded in household and community life. These findings are in line with Berger and Luckmann's (1966) social construction of reality in that those participants' interactions and routines become habitualized and meanings are imbedded into individuals and society. Therefore social reality is said to be socially constructed.

Clarke et al (2004) found that consumers' actual choices are shaped by a wide range of social and cultural issues, as well as by economic questions of price/ income and geographical questions of physical proximity. This is consistent with findings in this study where participants and communities create norms within their shopping practices, attribute meanings and create habitus through human social interactions (Seale, 2004).

Although individual choice was a major factor in determining where participants' shopped, availability of stores and availability within stores was also influential. In certain areas, for example Castlebay on Barra, participants often used alternative suppliers to access produce they required for their household, such as good quality meat, as the choice of stores and produce within these stores was more limited than in other areas e.g. Stornoway on Lewis. Participants using alternative food networks in Barra did so to ensure a regular supply of good quality produce such as meat. These networks were regarded as more of a necessity than a genuine choice. Other studies have found alternative food networks were chosen over other options, such as a supermarket, as an ethical or lifestyle choice (Weatherell et al, 2003; Kneafsey et

al, 2007). For participants in this study these alternative networks were an integral and essential part of food provision to make up for the shortfall in supply through conventional retail channels.

Many of those who had suitable land available grew vegetables to ensure the household had access to good quality vegetables. Supplies in store were of variable quality and coupled with infrequent supplies made shopping difficult and unpredictable. However, this option required suitable land, time and the physical capabilities to do so. Kneafsey et al (2007) found participants using alternative food networks increased their consumption of fruit and vegetables. Food frequency questionnaires revealed that fruit and vegetable consumption, although below recommended levels, were higher than in the general population. Those growing their own vegetables and cooking from basic ingredients are likely to have contributed to this raised consumption. Perhaps if more people had the land on which to grow vegetables this could be increased further.

Many participants were interested in growing their own vegetables but did not have suitable land on which to do so. Allotments or community growing projects where members of the community join together to produce fruit, vegetables and herbs might offer one solution with the produce shared amongst volunteers or sold through local markets or stores. Many of the problems remote and rural consumers face are geographically specific and vary even between local towns and villages therefore solutions must be found to suit individual areas and the populations which reside there.

Those who used alternative food networks reported a greater choice of produce, not necessarily in terms of a greater variety of options in terms of increased quality. Subsidising produce sales at community venues establishing a regular outlet where both the producer and the consumer knows there is a reliable and consistent supply of local produce might encourage sales.

10.7 Health

The idea of eating for health was particularly important for those who had diagnosed health problems or had recently had a health scare. Perceptions of healthy eating varied but most participants viewed cooking from basic ingredients as the best way to achieve a healthy diet. A 'proper meal' centred round meat or fish, potatoes and vegetables and for many was associated with the traditional island diet. Food frequency data from this study shows the diet contains too much meat and dairy products, associated with high saturated fat intakes which concurs with the traditional diet. This traditional diet is part of the island culture and although there is a shift towards a more contemporary diet for some, the traditional diet remains prominent within the crofting community.

Many of the areas in this study only had small stores with a limited selection of ready meals and processed foods. Although some participants used convenience foods occasionally most reported cooking from basic ingredients for the majority of meals. The lack of choice in terms of ready meals and take away options was given as a reason as to why some participants chose to cook from scratch. By cooking from basic ingredients it is likely that more vegetables will be used in cooking.

Eating locally produced food was associated with good health. Local produce was innately thought of as better quality. Knowing the source of the food, what the animals had been fed on and how the vegetables were grown was central to this idea of health. Conversely, participants did not know what had been 'pumped full off' and questioned the colour and uniformity of fresh store produce.

Connotations of health were particularly associated with home grown vegetables with participants reportedly eating more vegetables during harvest time. Many talked about the improved taste of home-grown vegetables with comments such as 'carrots taste like carrots'. Some participants only consumed certain vegetables e.g. broccoli when they were home grown. Living in such a remote area, many

participants seemed to have an understanding of food production having had some personal experience of growing or of family growing vegetables during childhood and the traditional island practice of crofting. Being involved in food production meant many participants were interested in trying to produce, preserve and cook food.

Just as alternative food networks reconnected consumers with retailers, growing and producing food appeared to reconnect participants with food. By involving communities and schools in growing projects this could encourage increased consumption of fruit and vegetables and promote cooking skills.

10.8 Sustainability

There was interest among participants in the Western Isles concerning producing and retaining more local produce on the islands. Participants did not expect to become self sufficient but felt more could be done to increase the availability of local food. Much of the meat and fish produced on the Western Isles is exported and although this must continue there could be better links between local crofters and local stores to retain some of this meat within the islands. Some participants reported purchasing whole carcasses of meat direct from the producer while others did not know how to access this supply.

Local shops and producers play a crucial role in the community. They provide flexibility in ordering, delivery and supply of produce to islanders increasing options in terms of variety, quality and convenience. Local produce increased the quality and choice of produce available however, not all participants were able to access these products due to inadequate information about availability or how to access this produce. Support could be given to encourage local producers and independent retailers to improve links, for example, local stores could act as a third party to provide an advertising platform for local producers and the point of contact for the consumer. This arrangement could be mutually beneficial to both the retailer and the producer as products draw in additional customers to the store and the producer gains

advertising of produce, a sales outlet for their produce and can have direct control over pricing of their produce.

Likewise a similar arrangement could be made with local fish farms in order to increase the availability for local consumers. Salmon was one product which the national retail survey found to be of limited availability in the Western Isles (Dawson et al, 2008). Although interviews revealed many islanders obtained fresh salmon by means other than through a store there some consumers who had difficulty accessing this product.

As participants who grew their own vegetables reported consuming more during harvest supporting growing projects and increasing the availability of land may increase vegetable production and consumption on the islands

By increasing the availability of local produce through local stores this could give consumers more options in store increasing their choice. It is this perception of choice which is of greatest importance to these remote consumers and participants who used a variety of supply networks combining the conventional with the alternative had a more positive perception of food retail provision.

10.9 Fish

Many participants had no problems sourcing fresh fish however some participants expressed difficulties in accessing the fishmongers or mobile fish vans with many not knowing when or where the mobile fishmonger was available. Fish is a product which we are encouraged to consume in larger amounts and many participants suggested they would like to eat more. Mobile fishmongers are present on the islands but many did not know where or when to access this service. There appeared to be a lack of advertising by these mobile vans, which suggests they have enough business and would not have enough stock for any extra clients. However, there may be an opportunity for mobile fishmongers and indeed other mobile grocers vans to increase trade as several participants said they would use these services if they were

available and others had used one in the past and would like to do so again as their service had stopped.

Although fish plays an integral part in the traditional island diet the island location of residence meant some participants were disappointed by the lack of availability of fish on the islands. However, interviews revealed there were options available for purchasing fresh fish but some found it difficult or did not make the extra effort required. Instead they preferred to do without or compromised quality of product for ease of access e.g. purchasing frozen breaded fish from the supermarket instead of fresh from the fishmonger. In regard to purchasing fresh fish it seems it must be both available and easily accessible for consumers to purchase it, as several participants knew where fish was available but did not make the extra effort required to actively access it.

10.10 Location Specific Solutions

In these remote communities there appears to be a greater awareness of retail supply issues and how this affects islanders as consumers. Differences in perceptions of retail food provision reflect the nature of the retail structure of an area with the presence of a large store resulting in a more favourable perception of provision. Although the Western Isles is considered as one area there were many differences between the different islands and even the communities within those individual islands.

Each area has a specific population, retail provision and traditional industries such as fishing or crofting which affect consumers' food needs and food access. As such an area specific approach is necessary in order to best address the specific problems of the community. Different sectors of the population also require different solutions to problems such as personal mobility for the elderly and more knowledge of mobile produce vans for those in the more remote communities.

Community consultation should be used to identify the needs of the area including those involved in the food retail sector in order to open and establish the lines of communication. In order to address problems an integrated approach must be adopted involving consumers, retailers, producers and the food supply chain. A relationship of trust and confidence between these stakeholders must be established in order for improvements to be made and solutions to problems found.

10.11 Contribution of the Research

In line with the research objectives this study has provided an in depth exploration of remote consumers perceptions of their food retail environment and how this affects their food access and the way in which they adapt to their retail environment. Focusing on consumers experiences of the food retail environment it examines the ‘final mile’ and the journey from the store to the home. It has provided a description and explanation of how consumers use the stores available and how produce in store affects shopping patterns, food choice and food consumption although some of the limitations of stores are overcome by alternative food networks.

The multi method approach used in this study combined with retail data from the national survey allows the same problem to be examined from a number of perspectives. This strengthens findings and provides further insights and explanations of the problem and this multi method approach could be used in future research. By combining methods this study was able to build a comprehensive picture of how participants use the retail environment and how this impacts on their food access and provides quantitative measures of food availability within the home and food consumption. These aspects have not been examined in combination prior to this study.

A principle contribution of the study has been the explanation of how participants adapt to the food retail environment. The extent to which alternative food networks are used in this area to compliment conventional food retail is highlighted. Alternative food networks in western society have been shown to be growing in

number (Cox et al, 2008; Weatherell et al, 2003) however they are commonly used as part of a larger set of ethical values and chosen over conventional retail options. This study differed in that these alternative networks were used to provide produce, which could not be purchased from stores.

Attree (2005) identified three key concepts concerning low income consumers and their management of poverty in relation to food access. Two of these three concepts were carried out by participants in this study, strategic adjustment and resigned adjustment. There were no examples of maternal adjustment given by participants in this study although this topic was not discussed directly during interview and the sample was not fully low income. Strategic adjustment was the most common with a number of participants giving several examples of material adjustment such as using shopping lists, storing food, using alternative food networks and the importance of support networks. Examples of resigned adjustment were also found with several participants shopping on a daily basis to manage their limited food budget and purchasing items which were reduced in order to achieve this. A number of participants had to produce their own food and utilise barter systems in order to provide food for their household without monetary expenditure, which requires a psychological change in lifestyle. In comparison to the consumers referred to in Attree's (2005) research, where participants were a low income group, participants in this research were a mixed income group. However, these strategies or coping mechanisms were necessary for all to improve the quality and consistency of food available for their household and in this way food availability in this remote community did not discriminate between income groups.

An informal sharing and barter system existed as a way of obtaining a wider range of foods for the household than would be possible from the stores alone. The absence of monetary exchange allowed excess food which has been produced to be traded for other food items out with the production capabilities of their household. For those using this barter system to sustain a reasonable proportion of their households' food requirements it is necessary to make their food production and household food procurement economically viable.

10.12 Limitations of Study and Areas for Future Research

The geographically remote position of the Western Isles makes this a unique study area as is the absence of all four of the major UK multiple retailers. In order to ascertain whether the perceptions of food access these islanders have is unique to the island location and whether the coping mechanisms they use and the way in which they adapt to their retail environment compares with another area, similar research should be carried out in remote or rural areas on the mainland.

This study aimed to examine what happens between the store and the home in regard to food access and used food frequency questionnaires to give an indication of participants' diets. However, the sample size was too small to carry out a full analysis. Consequently there is scope for further research to examine whether there is a direct relationship between food retail availability, other access issues and dietary behaviour by using dietary assessment combined with interviews and retail data. With a larger sample a more detailed account of islanders food consumption could be achieved and a comparison between areas with different retail store provision could be made in order to give an indication of the effect retail provision has on food consumption. In order to do this Stornoway in the north and Castlebay in south of the islands could be used as study areas. This would determine how diet is influenced by the stores available as those in Stornoway have access to a large store and a range of specialist stores whereas those in Castlebay only have one small chain store and two small independent stores.

Since completion of data collection in this study, Tesco has taken over the Somerfield store in Stornoway and has had plans accepted for an extension to the store (Stornoway Gazette, 2008)). This will undoubtedly have altered food retail provision in the area and increased competition with the co-op, the only other supermarket on the island, and other local stores. This study found remote consumers have lowered expectations of food retail provision and are resigned to manage and adapt their behaviour in order to access the stores and food choice they

require. It would be interesting to examine how the introduction of this major multiple has altered consumers' perceptions of their food retail environment and if this has had any subsequent effect on consumer expectations, shopping patterns or food consumption.

It may also be interesting to see if those living in the Southern islands would be tempted north for food shopping as this was something which was not reported in this study. It would be expected that the distance and expense of travelling to Stornoway from the Southern Isles would be too great for consumers to shop on a regular basis but may be something which they would do occasionally, perhaps at Christmas time when they reported particular difficulties purchasing the foods they required. In terms of travel costs a shopping trip to Stornoway would be cheaper and less time consuming than travelling to the mainland.

This study examines remote food access issues from a consumer perspective however future research could incorporate other stakeholders such as retailers and local councils. This should be designed to consider consumers' perspectives and aim to move the discussion towards identifying feasible solutions to consumers' food access problems.

BIBLIOGRAPHY

AA Route finder www.theaa.com/travelwatch/planner_main.jsp (Accessed 14th April 2008)

Acheson, D. (1998) Independent inquiry into inequalities in health report. The Stationary Office

AEA Technology (2005) The Validity of Food Miles as an Indicator of Sustainable Development Manchester Business School

AEA Technology (2006) The environmental impacts of food consumption and production; 5 Manchester Business School

Alcaly, R.E., Klevorick, A.K. (1971) Food prices in relation to income levels in New York The Journal of Business, Vol. 44, No. 4, pp. 380-397

Ambrose, D.M (1979) Retail grocery pricing: Inner city, suburban and rural comparisons The Journal of Business vol. 52, No. 1, pp. 95-102

Anderson, A.S., Dewar, J., Marshall, D., Cummins, S., Taylor, M., Dawson, J. and Sparks, L. (2007) The development of a healthy eating indicator shopping basket tool (HEISB) for use in food access studies – identification of key food items. Public Health Nutrition, 10:1440-1447

Anderson, A., Ellaway, A., Macintyre, S., McColl, K., Callender, R., Oswald, J. (1996) Community food initiatives in Scotland. Health Education Board for Scotland, Edinburgh. <http://www.healthscotland.com/documents/343.aspx> (accessed 5th November 2008)

Asksey and Knight (1999) Why interview? Interviewing for social scientists Sage London

Atkinson, P. and Coffry, A. (2002) Revisiting the relationship between participant observation and interviewing. In: Gubrium, J., Holstein, J. eds. Handbook of interview research: Context and method. Thousand Oaks, California. Sage; 801-14.

Atkinson, R and Flint, J (2002) Accessing hidden and hard-to-reach populations: Snowball research strategies Social Research Update 33
<http://www.soc.surrey.ac.uk/sru/SRU33.html> (Accessed 11th April 2006)

Attree, P. (2005) Low income mothers, nutrition and health: a systematic review of qualitative evidence Maternal and Child Nutrition, 1, 227-240

Baker, D. W., Wolf, M. S., Feinglass, J., Thompson, J. A., Gazmararian, J. A., Huang, J. (2007). Health Literacy and Mortality Among Elderly Persons. Arch Intern Med 167: 1503-1509

Barbour, R.S. (2005) Making sense of focus groups. Medical Education, 39:742-50

Barbour, R.S. (1999) The case for combining qualitative and quantitative approaches in health service research. BMC Health Service Research 4(1):39-43

Barry, Christine A. (1998). Choosing Qualitative Data Analysis Software: Atlas/ti and NUD.IST Compared. Sociological Research Online, 3(3). Available at <http://www.socresonline.org.uk/socresonline/3/3/4.html>.

Bava, C.M. ,Jaegar, S., Park, J. (2008) Constraints upon food provisioning practices in 'busy' women's lives: Trade-offs which demand convenience Appetite 50, (2-3), 486-498

Bazeley, P. (2007) Qualitative data analysis with NVivo. Sage Publications, London

- Beardsworth, A., Keil, T. (1997) *Sociology on the menu: An invitation to the study of food and society*. Routledge, London
- Belk, R. W. (1995). Hyperreality and globalization: Culture in the age of Ronald McDonald. *Journal of International Consumer Marketing*, 8(3/4), 23–37
- Bellisle, F. (2005) *EUFIC Review: The determinants of food choice*. Reference paper of the European Food Information Council
- Berger, P. L., Luckmann, T. (1966) *The Social Construction of Reality – A treatise in the sociology of knowledge* New York Anchor
- Biggerstaff, M. A., Morris, P. M., Nichols-Casebolt, A. (2002) Living on the edge: examination of people attending food pantries and soup kitchens *Social Work*, 47 (3), 267-277
- Blaikie, N (2006) *Designing social research: The logic of anticipation* Polity UK
- Blamey, A., Hanon, P., Judge, K., Muirie, J. (2002) *Health inequalities in the New Scotland*. Glasgow: Public Health Institute of Scotland
- Block, D., Kouba, J. (2006) A comparison of the availability and affordability of a market basket in two communities in Chicago. *Public Health Nutrition* 9: 837-845
- Bradshaw, J. (ed.) (1993) *Budget Standards for the United Kingdom*. Aldershot: Avebury
- Bradshaw, J., Middleton, S., Davis, A., Oldfield, N., Smith, N., Cusworth, L. and Williams, J. (2008) 'A minimum income standard for Britain: What people think.' York: Joseph Rowntree Foundation.
<http://www.jrf.org.uk/bookshop/eBooks/2226-income-poverty-standards.pdf>
 (Accessed 28th October 2008)

British Nutrition Foundation (2004) Healthy Eating, Nutrition Basics Accessed online www.nutrition.org.uk 12th December 2008

Broadbridge, A., Calderwood, E. (2002) Rural grocery shoppers: do their attitudes reflect their actions? *International Journal of Retail Distribution Management*, 30, (8), 394-406

Bromley, R.D. F., Thomas, C. J. (1993) The retail revolution, the carless shopper and disadvantage. *Transactions of the Institute of British Geographers, New Series*, 18, (2), 222-236

Burger, T. (2007) Max Webber's interpretive sociology, the understanding of actions and motives and Weberian view of man, 47 (2) 127-132

Burns, C. M., Gibbon, P., Boak, R., Baudinette, S., Dunbar, J.A. (2004) Food cost and availability in a rural setting in Australia. *Rural and Remote Health* 4: 311, 1-9

Burt, S.L. and Sparks, L. (2003) Power and competition in the UK retail grocery market. *British Journal of Management* 14: 237-254

Byrom, J., Medway, D. (2001) Issues of provision and "remoteness" in rural food retailing. A case study of the southern Western Isles of Scotland *British Food Journal* 103 (6), 400-413

Cabinet Office (2008) Food: An analysis of the issues The Strategy Unit

Cade, J., Thompson, R., Burley, V. and Warm, D. (2001) Development, validation and utilisation of food frequency questionnaires – a review. *Public Health Nutrition*: 5(4), 567-587

Calvert, C, Cade, J, Woodhouse, A & Barret, JUKWCS Steering Group (1997). Food frequency questionnaire (FFQ)—interpretation and analysis: issues for the UK Women's Cohort Study. *Proc. Nutr. Soc.*, 56, 117A

Casebeer, A.L. and Verhoef, M.J. (1997) Combining qualitative and quantitative research methods: Considering the possibilities for enhancing the study of chronic
Denzin, N.K., Lincon, Y.S. (1994) Introduction: entering the field of qualitative research. In N.K. Denzin and YS Lincon (Eds) *Handbook of qualitative research* (pp 1-17) Thousand Oaks CA: Sage

Diseases. Public Health Agency of Canada, 18:3 www.phac-aspc.gc.ca/publicat/cdic-mcc/18-3/d_e.html (Accessed 16th January 2008)

Clark, G.M, MacLellan, M., McKie, L, Skerratt, S (1995), *Food Availability & Choice in Remote & Rural Areas: Research Project Conducted in the Western Isles of Scotland*, Health Education Board for Scotland, Edinburgh

Clarke, G., Eyre, H., Guy, C (2002) Deriving indicators of access to food retail provision in British cities: Studies of Cardiff, Leeds and Bradford Urban Studies, Vol. 39, No. 11, pp. 2041-2060

Clarke, I., Hallsworth, A., Jackson, P., de Kervenoal, R., Perez-del-Aguli, R., Kirkup, M. (2004) Retail competition and consumer choice: contextualising the 'food deserts' debate *International Journal of Retail and Distribution Management*, 32, (2), 89-99

Clarke, I., Hallsworth, A., Jackson, P., de Kervenoal, R., Perez-del-Aguli, R., Kirkup, M. (2006) Retail restructuring and consumer choice 1. Long-term local changes in consumer behaviour: Portsmouth, 1980-2002 *Environment and Planning A*, 38, 25-46

Clarke, I., Kirkup, M., Oppewal, H. (2007) Are consumers getting what they really want? Initial findings from a major survey of consumer satisfaction with their local selection of grocery stores. Advanced Institute of Management Research

Competition Commission (2007) The supply of groceries in the UK market investigation. Provisional findings report

Consumers Association (1997) Policy Paper The food divide – eating on a low income

Corner, J. (1991) In search of more complex answers to research questions: Qualitative versus Quantitative research methods: Is there a way forward? *Journal of Advanced Nursing*, 16:718-27

Cox R, Kneafsey M, Venn L, Holloway, L, Dowler E, Tuomainen, H (2008) 'Constructing Sustainability through Reconnection - the case of 'alternative' food networks' in *Sustainable Rural Environments*, Editors: Robinson, G, Ashgate

Cummins, S. and Macintyre, S. (2002a), "Food deserts" - evidence and assumption in health policy making', *British Medical Journal*, Vol 325, August, 436-438

Cummins, S. and MacIntyre S. (2002b) A systematic study of an urban foodscape: The price and availability of food in Greater Glasgow. *Urban Studies*, 39:2115-30.

Cummins, S., Findlay, A., Higgins, C., Petticrew, M., Sparks, L. (2005) Do large-scale food retail interventions improve diet and health? *BMJ*, 330:6843–44.

Cummins, S., Findlay, A., Higgins, C., Petticrew, M., Sparks, L., Thomson, H., (2008) "Reducing inequalities in health and diet: findings from a study on the impact of a food retail development" *Environment and Planning A* 40(2) 402 – 422

Cummins, S., Petticrew, M., Higgins, C., Findlay, A., Sparks, L. (2005) Large scale food retailing as an intervention for diet and health: quasi-experimental evaluation of a natural experiment *Journal of Epidemiology and Community Health*, 59, 1035-1040

Curti, L (1993) Using diaries in social research *Social Research Update Issue 2* University of Surrey www.soc.surrey.ac.uk/sru/SRU2.html Last accessed 14th April 2006

Dawson, J. A. (1995) Retail trends in Scotland: a review. *International Journal of retail and distribution management*, 23, (10), 4-20

Dawson, J.A. (2000) Retailing at century end: competing in volatile markets. *Industrial marketing management* 29: 37-44

Dawson, J., Marshall, D., Taylor, M., Cummins, S., Sparks, L. and Anderson, A. (2008) Accessing Healthy Food: A Sentinel Mapping Study of Healthy Food Retailing in Scotland. Food Standards Agency (Scotland) Research Project S04005

DEFRA (2001) Rural Affairs – Rural Strategy Accessed online 6th November 2008 www.defra.gov.uk/rural/stratgy/annex_b.htm

DEFRA (2008) Rural affairs, Rural Strategy. Accessed online 27th November 2008 www.defra.gov.uk

Department of Health (UK) (1996). The health of the nation. Low income, food, nutrition and health: strategies for improvement. A report by the Low Income Project Team for the Nutrition Task Force.

DETR (2000) “Minister tells retailers and planners to tackle ‘food deserts’” News release 12th July, Department of the Environment, Transport and Regions, London

- Dicicco-Bloom, B., Crabtree, B.F. (2006) The qualitative research interview. *Medical Education*. Apr; 40(4):314-21
- Dibsdall, L.A., Lambert, N., Bobbin, R.F., Frewer, L.J. (2002) Low income consumers' attitudes and behaviour towards access, availability and motivation to eat fruit and vegetables *Public Health Nutrition*: 6(2), 159-168
- Donkin, A.J.M., Dowler, E., Stevenson, S.J. & Turner, S.A. (1999) Mapping access to food at a local level *British Food Journal*, 101, pp. 554-564.
- Dowler, E (1998) Food poverty and food policy *IDS Bulletin* 29 (1), 58-65
- Drewnowski, A. (2003a). The role of energy density *Lipids* 38(2): 109-115
- Drewnowski, A. (2003b). Fat and sugar: an economic analysis *Journal of Nutrition* 133(3): 838S-840S
- Eat Well South Australia (1999) Food, Nutrition, Low Income and Health in Australia. Eat Well SA, Women and Children's Hospital, North Adelaide, South Australia
- Edwards P, Roberts I, Clarke M, DiGuseppi C, Prata S, Wentz R, Kwan I, Cooper R. Methods to increase response rates to postal questionnaires. *Cochrane Database of Systematic Reviews* 2003, Issue 4. Art. No.: MR000008. DOI: 10.1002/14651858.MR000008.pub3 Accessed 20th January 2008
- Engler-Stringer, R., Berenbaum, S. (2007) Exploring food security with collective kitchens participants in three Canadian cities *Qualitative Health Research*, 17 (1), 75-84

Enteleca (2000) Tourist Attitudes towards Regional and Local Foods. Report prepared for MAFF and the Countryside Agency. Enteleca Research and Consultancy Ltd., London.

Esposito, K., Giugliano, D. (2006) Diet and inflammation: a link to metabolic and cardiovascular diseases *European Heart Journal*, 27, 15-20

European Commission (2004) Joint Report on Social Inclusion Accessed online http://ec.europa.eu/employment_social/soc-prot/soc-incl/joint_rep_en.htm#top (31st July 2009)

European Food Information Council (2005)EUFIC Review Reference paper of the European Food Information Council Accessed online www.eufic.org (14th September 2008)

Family Budget Unit (1998) Low Cost but Acceptable, A minimum income standard for the UK: families with young children. Bristol: The Policy Press.

Family Budget Unit (2000) Low cost but Acceptable incomes for older people, A minimum income standard for households aged 65-74 years in the UK. Bristol: The Policy Press

Family Budget Unit (2004) Low cost but acceptable, A minimum income standard for a single man aged 22-30 years. Bristol, UK

Fieldhouse, P. (1988) Food and Nutrition: Customs and Culture. New York, USA.

Fitch, D. (2004) Measuring convenience: Scot's perceptions of local food and retail provision. *International Journal of Retail and Distribution Management*, 32, (2), 100-108

Flick, U. (1992) Triangulation Revisited: Strategy of validation or alternative? *Journal for the Theory of Social Behaviour*, Vol. 22, No. 2, pp. 175-197

Food and Agriculture Organisation (2001) The state of food insecurity in the world, 2001. www.fao.org/docrep/003/y1500e/y1500e00.htm Last accessed 20th October 2008

Food Matters (2003) Review of existing UK work on food and low income initiatives. A report for the FSA by Food Matters

FSA (2007) Eat Well Plate Accessed 16th April 2009
<http://www.eatwell.gov.uk/healthydiet/eatwellplate/>

Food Standards Agency Scotland (2003) Diet and Nutrition Strategy: Our role in implementing the Scottish Diet Action Plan. Aberdeen. Food Standards Agency Scotland

Furey, S., Strugnell, C., McIlveen (2001) An investigation of the potential existence of 'food deserts' in rural and urban areas of Northern Ireland *Agriculture and Human Values* 18: 447-457

Furst, T., Conner, M., Bisogni, C. A, Sobal, J., Winter Falk, L. (1996) Food choice: A conceptual model of the process *Appetite*, 26, 247-266

Garret, S. (2004) Access to healthy food: Differences between affluent and low-income neighbourhoods in Tacoma, Washington

General Registrar of Scotland (2003) Occasional Paper No. 10 Scotland's census 2001 Statistics for Inhabited Islands

Gibbs, A (1997) Focus Groups Social Research Update Issue 19 University of Surrey www.soc.surrey.ac.uk/sru/SRU19.html Last accessed 13th April 2006

Gibson, E.L. (2006) Emotional influences on food choice: Sensory, physiological and psychological pathways. *Physiology and Behaviour*. 89: 53-61.

Giskes, K, Turrell, G., Paterson, C., Newman, B. (2002) Socioeconomic differences among Australian adults in consumption of fruit and vegetables and intakes of vitamins A, C and folate. *Journal of Human Nutrition and Dietetics*, 15, 375-385

Goodman, C.S (1968) "Do the poor pay more?" *Journal of Marketing*, 32, 18-24

Gordon, D, Adelman L, Ashworth K, Bradshaw J, Levitas R, Middleton S, Pantazis C, Patsios D, Payne S, Townsend P and Williams J. (2000) Poverty and Social Exclusion in Britain, Joseph Rowntree Foundation

Gordon, N. (2002) A question of response rate. *Science Editor*, 25(1):25

Gray. D., Farrington, J., Shaw, J., Martin S., Roberts, D. (2001) Car dependence in rural Scotland: transport policy, devolution and the impact of the fuel duty escalator *Journal of Rural Studies* 17, 113-125

Greenstein, T.N. (2000). Economic Dependence, gender, and the division of labour in the Home: A replication and extension. *Journal of Marriage and the Family* 62:322-335.

Guion, L (2001) Conducting an in-depth interview Family Youth and Community Sciences Institute of Food and Agriculture Sciences, University of Florida Accessed online www.edis.ifas.ufl.edu/pdffiles/FY/FY39300.pdf 12th April 2006

Guy, C.M. and David, G. (2004) Measuring physical access to 'Healthy Foods' in areas of social deprivation: A case study of Cardiff International Journal of Consumer Studies, 28:222-34

Hammersley, M & Atkinson, P. (1995) Ethnography: Principles in practice Sage London

Hanlon, P., Lawder, R.S., Buchanan, D., Redpath, A., Walsh, D., Wood, R., Bain, M., Brewster, D.H., Chalmers, J. (2005) Why is mortality higher in Scotland than in England and Wales? Decreasing influence of socio-economic deprivation between 1981 and 2001, supports the existence of a 'Scottish Effect' Journal of Public Health, 27, (2), 199-204

Hare, C., Kirk, D., Lang, T. (2001) The food shopping experience of older consumers in Scotland: critical incidents International Journal of Retail and Distribution Management, 29 (1), 25-40

Hayes, L.R. (2000) Are prices higher for the poor in New York City? Journal of Consumer Policy 23: 127-152.

Health Education Authority (1995) Health in England. What people know, what people think, what people do. London Office for National Statistics

Health First (2000) Food availability mapping Year one – Interim report 1999-2000 Health Action Zone, Lambeth, Southwark and Lewisham

Health Scotland (2006) A review of the Scottish Diet Action Plan: Progress and impacts 1996-2005 NHS Health Scotland

Health Statistics Quarterly (2000) Online National Statistics Data Average for 1997-1999 for England and Wales

- Henderson, L., Gregory, J., Irving, K. (2003) *The National Diet and Nutrition Survey: Adults Aged 19-64 years, Volume 2: Energy, Protein, Carbohydrate, Fat and Alcohol Intake*. London, HMSO
- Hersey, J., Anliker, J., Miller, C., Mullis, R.M., Daugherty, S., Das, S., Bray, C. R., Dennee, P., Sigman-Grant, M., Thomas, H. O. (2001) Food shopping practices are associated with dietary quality in low income households *Journal of Nutrition Education*, 33, Supplement 1
- Hinrichs, C. C. (2000) Embeddedness and local food systems: notes on two types of direct agricultural market *Journal of Rural Studies* 16, 295-303
- Holbrook, B., Jackson, P. (1996) Shopping around: Focus group research in North London. *Area*, 28:136-52
- Holloway, L., Kneafsey, M. (2000) Reading the space of the farmers' market: a preliminary investigation from the UK. *Sociologia Ruralis* 40, 285-299
- Holloway, L., Kneafsey, M., Venn, L., Cox, R., Dowler, E., Tuomainien, H. (2007) Possible food economies: A methodological framework for exploring food production-consumption relationships *European Society for Rural Sociology*, 47 (1), 1-19
- Holmes, B. A., Roberts, C. L., Nelson, M. (2008) How access, isolation and other factors may influence food consumption and nutrient intake in materially deprived older men in the UK *Nutrition Bulletin* 33(3), 212-220 (9)
- Hopkins, P. (2007) Thinking critically and creatively about focus groups. *Area*, 39.4:528-535

Horowitz, C.R, Colson, K.A, Herbert, P.L, Lancaster, K (2004) Barriers to buying healthy foods for people with diabetes: Evidence of environmental disparities American Journal of Public Health, Vol 94, No. 9, pp. 1549-1554

Hunter, W., Worsley, W. (2008) Understanding the older food consumer: present day behaviours and future expectations. *Appetite* Accessed online (In press accepted 9th September 2008)

IGD (2002) Consumer Attitudes to Food and Grocery Issues—Local and Regional Foods. IGD Business Publications.

Jackson, P., Perez del Aguila, R., Clarke, I., Hallsworth, A., de Kervenoael, R., Kirkup, M. (2006) Retail restructuring and consumer choice 2. Understanding consumer choice at the household level *Environment and Planning A*, 38, 47-67

Jarret, D. J. (2000) Outshopping behaviour: an explanation of behaviour by shopper segment using structural equation modelling. *International Review of Retail, Distribution and Consumer Research*, 10, (3), 287-304

James, W., P., T., Nelson, M., Ralph, A., Leather, S. (1997) Socioeconomic determinants of health: The contribution of nutrition to inequalities in health. *British Medical Journal*, 314, 1545-1553

Jetter, K. M., & Cassidy, D. L. (2006). The availability and cost of healthier food alternatives. *American Journal of Preventive Medicine*, 30, 38–44.

Jick, T.D (1979) Mixing qualitative methods: Triangulation in action *Administrative Science Quarterly*, Vol.24, Dec, pp. 602-611

Jones, P., Comfort, D., Hillier, D. (2004) A case study of local food and its routes to market in the UK. *British Food Journal* 106:4: 328-335

Kandermans, B., Staggenborg, S. (2002) *Methods of social movement research* University of Minnesota Press

Kane, E.W. and Macaulay, L.J. (1993) Interviewer gender and gender attitudes. *The Public Opinion*, 57;1,1-28

Kaufman, P.R. (1999) Rural poor have less access to supermarkets, large grocery stores. *Rural development perspectives*, 13, (3), 19-26

Kirkup, M., Kervenoael, R.D., Hallsworth, A., Clarke, I., Jackson, P. and Aguila, R. P.d. (2004) Inequalities in retail choice: exploring customer experiences in suburban neighbourhoods. *International Journal of Retail Distribution Management*, 32, 511-522(12)

Kirwan, J. (2004) Alternative strategies in the UK Agro-Food system: Integrating the alternaty of farmers' markets *European Society for Rural Sociology*, 44 (4), 395-415

Kneafsey, M., Holloway, L., Cox, R., Dowler, E., Venn L., Tuomainen, H. (2007) *Reconnecting Consumers, Food and Producers: Exploring 'Alternative' Networks* Oxford: Berg

Koster, E.P. (2007) Diversity in the determinants of food choice: A psychological perspective. *Food Quality and Preference*. www.sciencedirect.com (Accessed 10th January 2008)

Krebs-Smith, S.M., Heimendinger, J., Subar, A.R., Patterson, B.H., Pivonka, E. (1995) Using food frequency questionnaires to estimate fruit and vegetables intake: association between the number of questions and total intake. *J. Nutr. Educ.*, 27, 80–88.

Kusow, A.M. (2003) Beyond indigenous authenticity: Reflections on insider/outsider debate in immigration research *Symbolic Interaction* Vol. 26, No. 4, pp. 591-599

Kvale, S. (1996) *InterViews: An introduction to qualitative research interviewing*. Sage Publications

Leather, S. (1996). The making of modern malnutrition. An overview of food poverty in the UK. London UK: The Caroline Walker Trust

Lee, A. J., Darcy, A.M., Leonard, D., Stubbs, C.O., Lowson, S.K., Dunn, S.M., Coyne, T., Riley, M. (2002) Food availability, cost disparity and improvement in relation to accessibility and remoteness in Queensland. *Australian and New Zealand Journal of Public Health*, 26, 266-272

Lennermas, M., Fjellstrom, C., Becker, W., Giachetti, I., Schmitt, A., Remaut ed Winter, A., Kearney, M. (1997) Influences on food choice perceived to be important by nationally representative samples of adults in the European Union *European Journal of Clinical Nutrition*, 51, Suppl 2: S8-15

Lester, S. (1999) An introduction to phenomenological research Stan Lester Developments Accessed online 21st October 2009 www.sld.demon.co.uk/resmethy.pdf

Leyland, A.H., Dundas, R., McLoone, P., Boddy, F.A. (2007) Inequalities in Mortality in Scotland, 1981-2001. MRC Social and Public Health Sciences Unit Occasional Paper no. 16. Glasgow: MRC Social and Public Health Sciences Unit

Liese, A, D., Weis, K.E., Pluto, D., Smith, E. & Lawson, A. (2007) Food store types, availability and cost of foods in a rural environment. *Journal of the American Dietetic Association*. Vol.107, no. 11, pp. 1916-1923

Low income project team (1996) Reporting on the nutrition task force in Low income, food, nutrition and health

Lynch, J., Smith, J. D., Hillemeier, M., Shaw, M., Raghunathan, T., Kaplan G. (2001) Income inequality, the psychosocial environment, and health: comparisons of wealthy nations *Lancet*, 358, 194-200

Lyon, P. and Colquhoun, A. (1999) Home, hearth and table: a centennial review of the nutritional circumstances of older people living alone. *Ageing & Society*, 19, pp 53-67

Marcus, B.H. (1969) Similarity of ghetto and non-ghetto food costs *Journal of Marketing Research*, Vol. 6, No. 3, pp. 365-368.

Margetts, B.M., Nelson, M. (1997) Design concepts in Nutrition Epidemiology. Oxford. Oxford University Press

Marsh, R. (1998) Food security and community nutrition: Building on traditional gardening to improve household food security. *Food, nutrition and agriculture*, 22

Marshall, D.W., Anderson, A.S. (2002) Proper meals in transition: young married couples on the nature of eating together *Appetite*, 39, 193-206

McEachern, M., Warnaby, G. (2005) Food shopping behaviour I Scotland: the influence of relative rurality *International Journal of consumer Studies*, 30, (2), 189-201

McGinn, M, K. (2005) Ethical and friendly researchers, but not insiders: A response to Blodgett, Boyer and Turk *Forum: Qualitative Social Research* Vol. 6, No. 3, Art. 37

MacKay, G.A., Laing, G. (1982) Consumer problems in rural areas. Scottish consumer council, Glasgow

McKie, L., Clark, G., MacLe, M. and Skerratt, S. (1998) The promotion of healthy eating: food availability and choice in Scottish island communities. *Health Education Research*, 13 (3), 371-382

Moffatt, S., White, M., Mackintosh, J., Howel, D. (2006) Using qualitative and quantitative data in Health Service Research – what happens when mixed method findings conflict? *BMC Health Service Research* , 8 (6):28

Morgan, D.L (1997) Focus groups as qualitative research Second Edition Sage London

Morgan, D.L. (1998) Practical strategies for combining qualitative and quantitative methods: applications to health research. *Qualitative health research*, 8: 362-76

Morland, K, Wing, S, Diez Roux, A, Poole, C (2002a) Neighbourhood characteristics associated with the location of food stores and food service places *American Journal of Preventative Medicine* 22(1), pp.23-29

Morland, K, Wing, S, Diez Roux, A (2002b) The contextual effect of the local food environment on residents' diets: The Atherosclerosis risk in communities study *American Journal of Public Health*, Vol 92, No. 11, pp. 1761-1767

Morrison, M., Moir, J. (1998). The role of computer software in the analysis of qualitative data: efficient clerk, research assistant or Trojan horse? *Journal of Advanced Nursing*, 28(1), 106-116.

Hinchliffe, S.J.; Crang, M.A.; Reimer, S.M., Hudson, A.C. (1997). Software for qualitative research: 2. Some thought on "aiding" analysis. *Environment and Planning A*, 29, 1109-1124.

Morton, L.W, Oakland, M.J, Bitto, E.A, Sand, M (2003) Food in my community: A case study of a Des Moines, Iowa neighbourhood Sociology Technical Report No. 1002, Iowa State University, Department of Sociology

Nathoo, T, Shovellear, J. (2003), Do healthy food baskets assess food security? Chronic Diseases in Canada, Vol. 24, No. 2/3, pp. 65-69.

National Food Alliance (1997) Myths about Food and Low Income NFA London

National Statistics Online (NSO, 2004) Social Inequalities – Income www.statistics.gov.uk/cci/nugget.asp?id=1005 (Accessed online 15th December 2008)

National Statistics Online (NSO, 2008) Population Statistics www.statistics.gov.uk/cci/nugget.asp?ID=949 (Accessed 2nd November 2008)

NCH (formerly National Children's Home) (2004) Going hungry: the struggle to eat healthily on a low income. NCH

Nelson, M, Dick, K, Holmes, B. (2002). Food budget standards and dietary adequacy in low-income families. Proceedings of the Nutrition Society, Vol. 61, pp. 569-577.

New Policy Institute (2000) Food access – Whose responsibility? New Policy Institute

O'Cathain, A., Murphy, E., Nicholl, J. (2007) Why and how mixed methods research is undertaken in health service research in England: A mixed methods study. BMC Health Service Research, 14:7:85

ONS (2002) Family spending. London:TSO

ONS (2007) Household sector: Use of Disposable Income Account, Consumer trends 2007

O'Neil, M. (2005), Putting food access on the radar: how to target and prioritise communities at risk. National Consumer Council

Office for National Statistics (2001) Family expenditure Survey: % of household with cars by income group, tenure and household composition Office for National Statistics

Office of National Statistics (2002) Family Spending. London: TSO

Office of National Statistics (2007) Family spending 2006, London TSO

Patrick, H., Nicklas, Y.A. (2005) A review of family and social determinants of childrens eating patterns and diet quality. Journal of the American college of Nutrition, 24, (2), 83-92

Patton, M. Q. (1990). Qualitative evaluation and research methods (2nd ed.). Newbury Park, CA: Sage Publications

Payne, G and Payne, J (2004) Key concepts in Social Research Sage Publications London

Piacentini, M., Hibbert, S. Al-Dajani, H. (2001) Diversity in deprivation: exploring the grocery shopping behaviour of disadvantaged consumers. International review of retail, distribution and consumer research, 11, (2), 141-158

Pollard, J., Kirk, S. F.L., Cade, J.E. (2002) Factors affecting food choice in relation to fruit and vegetable intake: a review Nutrition Research Reviews, 15, 373-385

PPG 6 (1998) Town centres and retail developments (Revised) The Institute of Civil Engineers, TSO, London

PPS 6 (2005) Planning Policy Statement 6: Planning for town centres Office for the Deputy Prime Minister, Creating sustainable communities

Pretty, J.N., Ball, A.S., Lang, T., Morison, J.I.L. (2005). Farm costs and food miles: An assessment of the full cost of the UK weekly basket, *Science Direct, Food Policy* 30, 1–19.

Rayner, M., and Scarborough, P. (2005) The burden of food related ill health in the UK. *Journal of Epidemiology and Community Health*, 59, 1054-1057

Robertson, A. (2001) Social inequalities and the burden of food related ill health. *Public Health Nutrition*, 4 (6A), 1371-1373

Research and Markets (2008) Trends in food shopping market assessment 2008 Accessed online www.researchandmarkets.com 28th November 2008

Rex, D. and Blair, A. (2003) Unjust de(s)erts: food retailing and neighbourhood health in Sandwell. *International Journal of Retail and Distribution Management*, 31: 9: 459-465

Riboli, E., Norat, T. (2001) Cancer prevention and diet: opportunities in Europe *Public Health Nutrition*, 4, 475-484

Riches, G (1996) 'Hunger, food security and welfare policies: Issues and debates in first world societies' Paper presented to Nutrition Society Summer meeting, June, 1996

Ritchie, J, Lewis, J (2005) Qualitative research practice: A guide for social science students and researchers Sage Publications London

Rothenburg, R.B (1995) Commentary: Sampling in social networks *Connections* 18 (1): 104-10

Rubin, H.J. and Rubin, I.S. (1995) Interviews as guided conversations *Qualitative Interviewing: The art of hearing data* Sage London

Rural Development Commission (1990) English village services in the eighties.

Rural Development Commission (1994) Village shops mean business, Rural Development Commission, Salisbury

Rural Scotland Price Survey (2003) Rural Scotland Price Survey: Survey Report. Snedden Economics

Ruston, M (2002) Difficulty in accessing key services National Statistics www.statistics.gov.uk/accesstoservices Accessed 30th March 2006

Scottish Collaboration Group (2005) Food Frequency Questionnaire version 6.5. University of Aberdeen

Scottish Community Diet Project (1998) Fair Choice Scottish Consumer Council

Scottish Community Diet Project (2003) Food and Health on Scottish Islands: A networking conference for island communities. Scottish Consumer Council.

Scottish Executive (2000) Department of Health. Our national health: A plan for Action, a plan for change. Edinburgh. Scottish Executive

Scottish Executive (2000) Rural Scotland: A new approach, May. HMSO, Edinburgh

Scottish Executive (2003) Department of Health. Improving health in Scotland: the challenge Edinburgh. Scottish Executive

Scottish Executive (2004) Department of health. Coronary heart disease and stroke in Scotland: strategy update 2004. Edinburgh: Scottish Executive

Scottish Executive (2004) Department of Health. Eating for health: Meeting the challenge. Edinburgh. HMSO

Scottish Executive (2004) Research Study on the Effectiveness of NPPG 8: Town Centres and Retailing (ISBN 0-7559-4112-8).

Scottish Executive (2004) The Scottish Executive Urban Rural Classification. www.scotland.gov.uk. (Accessed 8th January 2008)

Scottish Executive (2005) The Scottish Health Survey 2003 Scottish Executive Edinburgh

Scottish Executive (2006) Scottish Index of Multiple Deprivation 2006: Technical Report. Edinburgh. Office of the Chief Statistician

Scottish Executive (2006) Scottish Planning Policy SPP 8 Town centres and retailing. Scottish Executive Development Department

Scottish Executive (2007) Scotlands people: Annual report Results from the 2005/2006 Scottish Household Survey

Scottish Government, Agriculture (2008)
<http://www.scotland.gov.uk/Topics/Agriculture> Accessed online 5th November 2008

Scottish Government (2008a) Healthy eating: Active living: An action plan to improve diet, increase physical activity and tackle obesity (2008-2011) Accessed 16th April 2009 <http://www.scotland.gov.uk/Publications/2008/06/20155902/0>

Scottish Government (2008b) Equally Well: Report of the Ministerial Task Force on Health Inequalities Accessed 16th April 2009 <http://www.scotland.gov.uk/Publications/2008/06/09160103/0>

Scottish Government (2008c) Choosing the right ingredients: The future of food in Scotland Discussion paper. Scottish Government

Scottish Office (1993) The Scottish Diet (The James report) Edinburgh: The Scottish Office

Scottish Office (1996) Eating for Health: A Diet Action Plan for Scotland. Edinburgh: The Scottish Office Department of Health

Scottish Office (1999) Department of Health. Towards a healthier Scotland: A white paper on health. Edinburgh. HMSO

Scottish Poverty Information Unit (1999) Rural poverty in Scotland Briefing Sheet 10 School of Social Sciences, Glasgow Caledonian University

Scottish Public Health Observatory (ScotPHO) (2009) Diet and Nutrition: Introduction. ScotPHO Public Health Information for Scotland. Accessed 16th April 2009 http://www.scotpho.org.uk/home/Behaviour/Dietandnutrition/diet_intro.asp

Seale, C. (2004) Researching society and culture 2nd Edition Sage

Shaw, H.J. (2006) Food deserts: Towards the development of a classification. Geogr. Ann 88 B (2) 231-247

Shaw, M., Davey Smith, G., Dorling, D. (2006) Health inequalities and New Labour: How the promises compare with the real progress. *British Medical Journal*, 330, 1016-1021

Short, F. (2003) Domestic cooking skills – what are they? *Journal of the HEIA*, 10, (3), 13-22

Skerratt, S. (1999) Food availability and choice in rural Scotland: the impact of “place” *British Food Journal*, 101 (7), 537-544

Skerratt, S. and Mc Kie, L. (1997) End of the road: Food access and availability in Upper Loch Torridon and Thurso Highland Health Board

Sloane, D.C., Diamont, A.L., Lewis, L.B., Yancey, A.K., Flynn, G., Nascimento, L.M., et al. (2003) Improving the nutritional resource environment for healthy living through community-based participatory research. *Journal of General Internal Medicine* 18(s1): 568-575

Smith, A., Sparks, L. (1997) Retailing and small shops. Development department research programme research findings No.40. Edinburgh. The Stationary Office

Smith, A., Sparks, L. (2000) The role and function of the independent small shop: the situation in Scotland. *International review of retail, distribution and consumer research*, 10, (2), 205-226.

Smith, A., Watkiss, P., Tweedle, G., McKinnon, A., Browne, M., Hunt, A., Treleven, C., Nash, C., Cross, S. (2005). The validity of food miles as an indicator of sustainable development: final report produced for DEFRA. Report number ED50254, Issue 7. Didcot, Oxfordshire, AEA Technology.

Social Research (2003) Research Findings No.4/2003 Land use and social policy research programme. *Living in Scotland: An urban-rural analysis of The Scottish*

Household Survey, Scottish Executive and Rural Development Department, Social Research Division, with assistance from the Scottish Agriculture College

Social Exclusion Unit (1998) *Bringing Britain Together: A national Strategy for Neighbourhood Renewal* Cm4945, HMSO, London

Social Exclusion Unit (2000) *National Strategy for Neighbourhood Renewal: A framework for Consultation* Social Exclusion Unit, HMSO, London

Social Exclusion Unit (2003) *Making connections: final report on transport and social exclusion* Social Exclusion Unit, HMSO, London

Sorensen, I. (2008) Media review: NVivo 7. *Journal of Mixed Methods Research*, 2, 106-108

Sooman, A., MacIntyre, S., Anderson, A. (1993) Scotland's health – a more difficult challenge for some? The price and availability of healthy foods in socially contrasting localities in the West of Scotland *Health Bulletin* 51(5)

SPP15 (2005) *Planning for Rural Development*, Scottish Executive, 2005 (ISBN 0-7559-2527-0).

Srinath Reddy, K., Katan, M.B. (2004) Diet, nutrition and the prevention of hypertension and cardiovascular diseases. *Public Health Nutrition*, 7,(1A), 167-186

Stitt, S., O'Connell, C., and Grant, D. (1995) Old, poor and malnourished. *Nutrition and Health*, 10, 135-154

Stornoway Gazette (2008) *Tesco plans get the go-ahead* Stornoway Gazette June 2008

Strategy Unit (2008) *Food: An analysis of the issues*. Cabinet Office London

- Struss, P., Anselm, L. and Corbin, J. (1998) Basics of qualitative research: Techniques and procedures for developing grounded theory (2nd Ed.) Sage California
- Sullivan, P., Savitt, R. (1997) Store patronage and lifestyle factors. *International Journal of Retail and Distribution Management*, 25, (11), 351-364
- Tarasuk, V., Reynolds, R. (1999) A qualitative study of community kitchens as a response to income related food security *Canadian Journal of Dietetic Practice Research*, 60 (1), 11-16
- Tashakkori, A., Teddlie, C. (2003) *Handbook of mixed methods in social and behavioural research* Sage London
- Turrel, G., Blakely, T., Patterson, C., Oldenburg, B. (2004) A multi level analysis of socioeconomic (small area) differences in household food purchasing behaviour. *Journal of Epidemiology and Community Health*, 58, (3)
- Vida, I., Fairhurst, A. (1999) Factors underlying the phenomenon of consumer ethnocentricity: evidence from four central European countries. *The International Review of Retail Distribution and Consumer Research*, 9, 321-337.
- Walters, R.G. and Jamil, M. (2003) Exploring the relationship between shopping trip type, purchases of products on promotion, and shopping basket profit. *Journal of business research*, 56: 17-29
- Wanless, D. (2004) *Securing good health for the whole population*. Report for HM Treasury.
- Wardle, J., Parmenter, K., Waller, J. (2000) Nutrition knowledge and food intake *Appetite*, 34, (3), 269-275

- Weatherell, C., Tregear, A., Allinson, J. (2003) In search of the concerned consumer: UK public perceptions of food, farming and buying local *Journal of Rural Studies* 19 233–244
- Webb, B. (2002) Using focus groups as a research method: A personal experience. *Journal of Nursing Management*, 10:27-35
- Webb, C and Kevern, J. (2001) Focus groups as a research method: A critique of some aspects of their use in nursing research. *Journal of Advanced Nursing*, 33(6):789-805
- Welsh, E. (2002) Dealing with data: Using NVivo in the qualitative data analysis process. *Forum: Qualitative Social Research*, 3 (2)
- Western Isles Council (2001) Fact file – population Accessed online 16th December 2008 www.cne-siar.gov.uk/factfile/population/index.ht.
- Whan Park, C, Iyer, E.S., Smith, D.C. (1989) The effects of situational factors on in-store grocery shopping behaviour: The role of store environment and time available for shopping. *The Journal of Consumer Research*, 15: 4: 422-433
- Whelan, A., Wrigley, N., Warm, D. and Cannings, E. (2002) Life in a ‘Food Desert’. *Urban Studies*, 39: 11: 2083-2100
- White, M. (2007) Food access and obesity. *Obesity Reviews* 8 (Suppl. 1), 99-107
- White, M., Bunting, J., Williams, L., Raybould, S., Adamson, A. and Mathers J. (2004) Do food deserts exist? A multi-level, geographical analysis of the relationship between retail food access, Socio-economic position and dietary intake. Food Standards Agency

Whitehead, M. (1998), 'Food Deserts': what's in a name?, Health Education Journal, Vol.57, pp.189-190.

Wicks, R., Travena, L.J., Quine, S. (2006) Experiences of food insecurity among urban soup kitchen consumers: insights for improving nutrition and well – being Journal of American Dietetic Association, 106 (6), 921-924

Williams, D.M. (2002). Food security and access in Akron, Ohio. Thesis. University of Akron.

Williams, C.C., Windebank, J. (2002) The excluded consumer: a neglected aspect of social exclusion? Policy and Politics, 30, (4), 501-513

Williams, P., Hubbard, P. (2001) Who is disadvantaged? Retail change and social exclusion. International review of Retail Distribution and Consumer Research, 11, (3), 267-286.

Wilson, L. C., Alexander, A., Lumbers, M. (2004) Food access and dietary variety among older people International Journal of Retail and Distribution Management, 32 (2), 109-122

World Health Organisation (2003) Diet, nutrition and the prevention of chronic diseases. WHO Technical Report Series No. 916. Switzerland. World Health Organisation

World Health Organisation (2008) World Health Statistics 2008 WHO Statistical Information System (WHOSIS)

Wrieden, W., Barton, K.L., Armstrong, J., McNeil, G. (2006) A review of food consumption and nutrient intakes from national surveys in Scotland: Comparison to the dietary targets. Commissioned by Food Standard Agency Scotland

Wrigley, N. (1998) PPG 6 and the contemporary UK food store development dynamic. *British Food Journal*, 100, (3), 154-161

Wrigley, N. (2002), Food deserts in British cities: policy context and research priorities *Urban Studies*, 39, 2029-40.

Wrigley, N., Guy, C. and Lowe, M (2002) 'Urban Regeneration, Social Inclusion and Large Store Development: The Seacroft Development in Context', *Urban Studies*, 39:11, 2101 - 2114

Wrigley, N., Warm, D., Margetts, B. (2003) Deprivation, diet and food retail access: Findings from the Leeds 'food deserts' study. *Environment and Planning A*, 35:151-88.

Wrigley, N., Warm, D., Margetts, B. and Lowe, M. (2004) The Leeds "food deserts" intervention study: what the focus groups reveal. *International Journal of Retail and Distribution Management*, 32: 2: 123-136

www.travelinescotland.com

www.uistwholefoods.com

Wylie, C., Copeman, J., Kirk, S.F.L. (1999) Health and social factors affecting the food choice and nutritional intake of elderly people with restricted mobility *Journal of Human Nutrition and Dietetics*, 12, 375–380

APPENDIX 1

SENTINEL CLASSIFICATION

Scottish Index of Multiple Deprivation (SIMD)

The SIMD is the Scottish Executives official tool for identifying small area concentrations of multiple deprivation across all of Scotland and is relevant to policies aimed at tackling the causes and effects of multiple deprivation. The SIMD provides a relative ranking of 6,505 small areas (data zones) across Scotland from the most deprived (ranked one) to the least deprived in Scotland (ranked 6,505).

See *Scottish Index of Multiple Deprivation 2006: General Report* (<http://www.scotland.gov.uk/Publications/2006/10/13142739/0>) for further information

Urban Rural Classification

The Scottish Executive urban rural classification 2003-2004 has been designed to be easy to understand and apply. It is based on settlement population sizes and drive times. It distinguishes between urban, rural and remote areas within Scotland and includes the following categories:

Table 1: Scottish Executive 6-fold Urban Rural Classification

1 Large urban areas	Settlements of 125,000 or more people
2 Other urban areas	Settlements of 10,000 to 125,000 people
3 Accessible Small towns	Settlements of between 3,000 and 10,000 people and within 30 mins drive of a settlement of 10,000 or more
4 Remote Small Towns	Settlements of between 3,000 and 10,000 people and with a drive time over 30 mins of a settlement of 10,000 or more
5 Accessible Rural	Settlements of less than 3,000 people and within 30 mins drive of a settlement of 10,000 or more
6 Remote Rural	Settlements of less than 3,000 people and with a drive time over 30 mins of a settlement of over 10,000 or more

APPENDIX 2

NEWSPAPER ADVERT

Do You Shop For Food?

Yes! - Then would like you to take part in my study?

Who am I looking for?

I am looking for anyone who carries out the main food shopping within the household to take part. Whether you are part of a family or living alone, young or elderly - I would like to speak to you.

What does it involve?

- An informal interview about your food shopping, lasting about 1 hour (i.e. your opinions/ experiences/ habits/ routines etc)
- Keeping a 1 week shopping diary (day of shop/ duration of shop/ location of shop etc)

About Me

I am a research student at the University of Edinburgh looking at the food shopping patterns of shoppers in remote and rural areas of Scotland.

How to get involved

If you would like to take part in this study or would like any more information about it, please feel free to contact me - Laura Nisbet either by e-mail: l.nisbet@sms.ed.ac.uk or by phone: 07940 591 170. For further information about this project see

<http://www.csrs.ac.uk/fsa.htm>

Thank You



APPENDIX 3

Types of Groups Contacted During Recruitment

Church groups

Connect – Womens support group

Scout groups

Community Furniture recycling project

Christian Trust

Tagsa Uibhist – Voluntary organisation based in Benbecula

Community Centre Organisations (Various)

Community associations (Various)

Social activities for the over 50's group

Lunch clubs

Playgroups

Mothers and Toddlers groups

Parent Teachers Associations

Housing partnership

Support groups - various

Bowling clubs

Community Psychiatric Nurses

APPENDIX 4

HEALTHY EATING INDICATOR SHOPPING BASKET ITEMS

(Dawson et al, 2008)

Fruit Products

Apples
Bananas
Grapes (white)
Oranges
Orange Juice
Pineapple (Tinned)
Frozen Berries

Vegetable Products

Onions
Carrots
Broccoli
Lettuce
Peppers
Tomatoes
Cucumber
Sweetcorn (Tinned)
Baked Beans
Peas

Carbohydrate Products

Potatoes
Weetabix
Porridge Oats
Bread Rolls
Bread Loaf (Wholemeal)
Pasta
White Rice
Brown Rice
Oven Chips

Protein Products

Chicken
Beef
Salmon
Haddock

Meal Products

Birds Eye Lasagne

Dairy Products

Semi skimmed milk
Skimmed milk
Low fat yoghurt
Low fat spread

APPENDIX 5

CONSENT FORM

UNIVERSITY OF EDINBURGH

Food Access in Remote and Rural Scotland

I am conducting a study about your food shopping experiences and your food choices. I invite you to participate in this research. Please read this form and ask any questions you may have before agreeing to be in the study.

This study is being conducted by Laura Nisbet, David Marshall (Supervisor), Management School, University of Edinburgh.

Confidentiality:

The records of this study will be kept private. In any sort of report I publish, I will not include information that will make it possible to identify you in any way.

Voluntary Nature of the Study:

Your participation in this study is entirely voluntary. If you decide to participate, you are free to withdraw at any time.

Contacts and Questions

My name is Laura Nisbet. You may ask any questions you have now. If you have questions later, you may contact me at 01875 320 455 or by e-mail l.nisbet@sms.ed.ac.uk.

Statement of Consent:

I have read the above information. My questions have been answered to my satisfaction. I consent to participate in the study and for the interview to be taped.

Signature of Study Participant

Date

Signature of Researcher

Date

APPENDIX 6

FOCUS GROUP TOPIC GUIDE

Introductions

LIKES – Good aspect of shopping in your neighbourhood

DISLIKES – Bad aspects of shopping in your neighbourhood

CHANGE – Things you would like to have or change if you had the chance

- **Perception of food access**

- How do they perceive their access to food shopping facilities
- What is it they think is good/ bad
- Realise that there can not be a shop on every corner as there is no demand to sustain this and in fact it is this way of life which the islanders like?

- **Shopping neighbourhood**

- How far do you have to travel for your food shopping?
- Do you normally buy your shopping in the store of your choice or is this determined by another factor?
- Loyalty to local store – ethics
- Additional cost for those on Barra to shop on another island
- Does shopping neighbourhood exist around the home/ work place/ other i.e. Family

- **How often do you shop and what determines this?**

- Delivery day
- Pay / benefit day

Local produce

Home grown vegetables, availability of meat and fish etc.

APPENDIX 7

INTERVIEW SCHEDULE

Introduction

- Tell me a little bit about yourself, how long you have lived here, family in household.....
- Describe a typical shopping trip – who shops/ how do you get there

Division of labour

- Responsibility within household for
 - shopping
 - cooking
 - items on shopping list

Shopping Patterns

- Frequency – bulk shop/ top up etc
- What influences this
- Do you think you try a wide variety of foods and new recipes etc
 - what influences this TV / magazines/ friends

Choice

- Is there a good selection in store? Compared to what?
- What influences your food purchases?
- What things are important to you when you are choosing food?
- Healthy foods? What would you describe as a healthy diet?
- Is there ever anything you can't get? What do you do?

Quality

- What is the quality of the produce like?
 - how long does perishable food last? Use by dates Veg last a week?
 - wastage
- Does this influence what you buy/ how often you shop?

Storage

- Fridge/ freezer/ cupboard space? Does this influence what you buy – fresh/ frozen/ tins/ frequency of shopping

Local Produce

- Do you buy local produce/ where from/ why? –is it better/ worse/ taste
- Do you think it is produced for the local market or export?
- GROW YOUR OWN – do you would you like to?

Shopping Practices

- Shopping lists
- Shopping around for best quality/. Price/ deals etc

PRICES – what do you think about the price of food/ compared to what?

APPENDIX 8

THANK YOU/ REMINDER LETTERS

Dear Participant,

I hope you are well. I am just writing to thank you for taking part in my study it is very much appreciated.

I have listened back to all my interviews from my visit and I think I have some great information. Everyone I visited was very helpful and friendly making my trip really enjoyable.

I am looking forward to receiving all the food frequency questionnaires and diaries back, sure they will contain a lot of interesting information.

If you have lost your diary or food frequency questionnaire and need another copy please let me know, it doesn't matter which week it is completed its more the days of the week and frequency I am interested in.

If you need another copy or have any questions you can contact me by e-mail: lnisbet@sms.ed.ac.uk or by phone/ text message: 07940 591 170

Thanks again for taking part,

Laura Nisbet

APPENDIX 9

SHOPPING DIARY

Shopping Diary



SHOPPING DIARY Day _____ Date _____

NAME OF SHOPPER _____

**TIME OF FOOD SHOPPING TRIP
(24HR)** _____

NAME OF FOOD SHOP/MARKET AND TYPE OF SHOP

MAIN TRANSPORT
(i.e. walk/ car/bus/taxi/lift etc) _____

DISTANCE TO FOOD SHOP
(please state miles or km) _____

**TIME TO TRAVEL TO THE FOOD
STORE (Mins)** _____

PURPOSE OF FOOD SHOPPING TRIP
(i.e. main shop/ top up) _____

**TIME SPENT IN FOOD
STORE (MINS)** _____

TOTAL SPEND
(£: pence)
please attach till receipt if available _____

**PART OF ANOTHER ACTIVITY (i.e. way to work/ visit friends/ non food
shopping)**

OTHER COMMENTS
(i.e. met friends/ social/ collecting benefit)

***If I have not arranged to collect this diary from you please
can you return to:***

**** ***** ****

E* ****

***If you have any questions please feel free to contact me on
07*** ** ****

OR

e-mail: l.nisbet@sms.ed.ac.uk

THANK YOU FOR YOUR PARTICIPATION

APPENDIX 10

FOOD FREQUENCY QUESTIONNAIRE



Diet Questionnaire



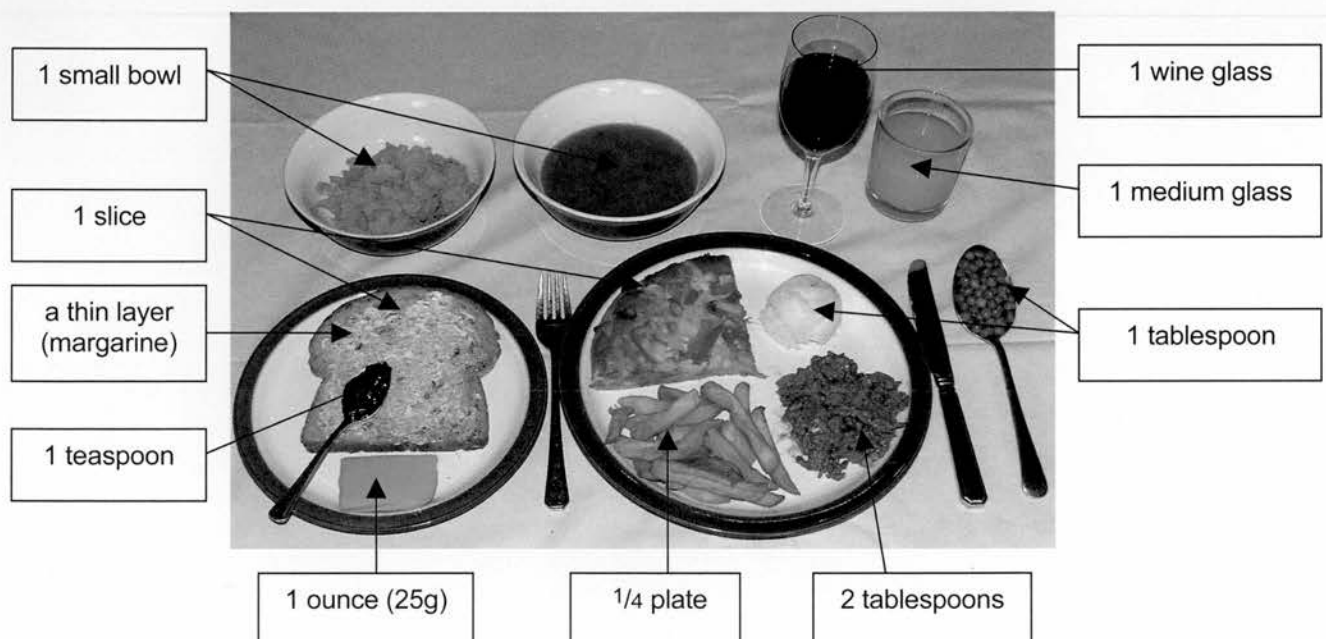
© University of Aberdeen, 2005

**Thank-you for agreeing to complete this questionnaire.
It should take 20-30 minutes to complete.**

Please take a few minutes to read the instructions carefully.

We would like you to describe your usual diet over the last 2-3 months. This should include all your main meals, snacks and drinks which you had at home or away from home e.g. at work, at restaurants or cafes and with friends and family.

The questionnaire lists 170 foods and drinks, and for each one a measure is given to help you estimate how much you usually have. The photograph below shows examples of some of these measures:



Please use **black or blue pen** to complete the questionnaire: do not use pencil.

How to complete the questionnaire

For **every line** in the questionnaire, we would like you to answer two things.

- **how much** of the food you had in a day you ate the food, and
- **how many** days a week you had the food.

To estimate **how much** of the food you had, you should circle a number under 'Measures per day'. Each food is described in common measures such as slices, glasses or tablespoons as illustrated in the photograph. *Please note that the measures are designed to be quite small, so your usual portion may easily be 2 or more measures.*

To estimate **how many** days a week you had the food, you should circle a letter or number under 'Number of days per week'.

- If you had the food less than once a month, you should circle **R** (for **R**arely or never). *For these foods you do not need to fill in the number of measures per day.*
- If you had the food more than once a month but less than once a week, you should circle **M** (for **M**onth).
- If you had the food on average 1-6 days a week, you should circle 1-6 as appropriate.
- If you had the food every day, you should circle 7.

The example below shows the answers for someone who had 4 slices of bread every day, 1 apple 5 days a week, $\frac{1}{2}$ a plate of chips (i.e. two $\frac{1}{4}$ plates) once or twice a month but rarely or never had tomato juice:

	Measure	Measures per day	Number of days per week
a) Bread (including toast & sandwiches)	1 medium slice	1 2 3 4 5+	R M 1 2 3 4 5 6 7
b) Apples	1 medium apple	1 2 3 4 5+	R M 1 2 3 4 5 6 7
c) Chips from a chip shop or restaurant	$\frac{1}{4}$ plate	1 2 3 4 5+	R M 1 2 3 4 5 6 7
d) Tomato juice	$\frac{1}{2}$ medium glass	1 2 3 4 5+	R M 1 2 3 4 5 6 7

If you want to change an answer, please put a **cross** through the wrong answer and circle the new answer (see example above).

If there are any foods or drinks that you eat regularly which do not appear on the questionnaire, please list them in section 20 ('other foods and drinks').

It is very important that you give an answer for every line.

If you rarely or never have a food, please make sure that you circle R.

1. Breads

	Measure	Measures per day	Number of days per week
a) Bread (including toast & sandwiches)	1 medium slice	1 2 3 4 5+	R M 1 2 3 4 5 6 7
b) Bread roll or bun	1 roll or bun	1 2 3 4 5+	R M 1 2 3 4 5 6 7
c) Croissants, butteries or garlic bread	1 roll or 2 pieces	1 2 3 4 5+	R M 1 2 3 4 5 6 7
d) Other breads (pitta, naan, soft tortillas)	1 pitta or 1/2 naan	1 2 3 4 5+	R M 1 2 3 4 5 6 7
e) Which type(s) of bread do you usually eat? Please tick one or more boxes.	White <input type="checkbox"/>	Brown / granary <input type="checkbox"/>	Wholemeal <input type="checkbox"/>

2. Breakfast Cereals

	Measure	Measures per day	Number of days per week
a) Cornflakes, Special K, Rice Krispies etc.	1 small bowl	1 2 3 4 5+	R M 1 2 3 4 5 6 7
b) Bran Flakes, Sultana Bran, All Bran etc.	1 small bowl	1 2 3 4 5+	R M 1 2 3 4 5 6 7
c) Shredded Wheat, Weetabix etc.	1 biscuit	1 2 3 4 5+	R M 1 2 3 4 5 6 7
d) Coco Pops, Frosties, Sugar Puffs, Crunchy Nut Cornflakes etc.	1 small bowl	1 2 3 4 5+	R M 1 2 3 4 5 6 7
e) Muesli (all types)	1 small bowl	1 2 3 4 5+	R M 1 2 3 4 5 6 7
f) Porridge or Ready Brek	1 small bowl	1 2 3 4 5+	R M 1 2 3 4 5 6 7

3. Milk (including milk on cereals and in drinks, but not in cooked foods)

	Measure	Measures per day	Number of days per week
a) Full fat milk	1/4 pint	1 2 3 4 5+	R M 1 2 3 4 5 6 7
b) Semi-skimmed milk	1/4 pint	1 2 3 4 5+	R M 1 2 3 4 5 6 7
c) Skimmed milk	1/4 pint	1 2 3 4 5+	R M 1 2 3 4 5 6 7
d) Soya milk	1/4 pint	1 2 3 4 5+	R M 1 2 3 4 5 6 7
e) Dried milk or creamer	1 teaspoon	1 2 3 4 5+	R M 1 2 3 4 5 6 7

4. Cream and Yogurt

	Measure	Measures per day	Number of days per week
a) Low fat yogurt (plain or fruit)	1 pot (125 ml)	1 2 3 4 5+	R M 1 2 3 4 5 6 7
b) Full fat yogurt (e.g. Greek)	1 pot (125 ml)	1 2 3 4 5+	R M 1 2 3 4 5 6 7

	Measure	Measures per day					Number of days per week								
c) Low calorie yogurt (plain or fruit)	1 pot (125 ml)	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
d) Fromage frais (plain or fruit)	1 pot (125 ml)	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
e) Cream (all types)	1 tablespoon	1	2	3	4	5+	R	M	1	2	3	4	5	6	7

5. Cheese

	Measure	Measures per day					Number of days per week									
a)	Full fat hard cheese (e.g. Cheddar, Gruyere, Wensleydale, Gouda)	1 oz. (25g) or 1 slice	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
b)	Medium fat cheese (e.g. (Edam, Brie, Camembert, Feta, cheese spreads)	1 oz. (25g) or 1 slice	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
c)	Full fat cream cheese (e.g. Philadelphia, Boursin, Danish Blue)	1 oz. (25g) or 1 tablespoon	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
d)	Low fat cheese (e.g. low fat cream cheese, low fat hard cheese)	1 oz. (25g) or 1 tablespoon	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
e)	Cottage cheese (all types)	1 tablespoon	1	2	3	4	5+	R	M	1	2	3	4	5	6	7

6. Eggs

	Measure	Measures per day					Number of days per week									
a) Boiled or poached eggs	1 egg	1	2	3	4	5+	R	M	1	2	3	4	5	6	7	
b) Fried eggs	1 egg	1	2	3	4	5+	R	M	1	2	3	4	5	6	7	
c) Scrambled eggs or omelette	1 egg	1	2	3	4	5+	R	M	1	2	3	4	5	6	7	

7. Meats (Meat substitutes e.g. Quorn or soya are listed in section 10)

	Measure	Measures per day					Number of days per week									
a)	Mince or meat sauce (e.g. bolognese)	2 tablespoons	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
b)	Sausages (pork, beef or frankfurters)	1 sausage	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
c)	Burgers (beef, lamb, chicken or turkey)	1 burger	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
d)	Beef (roast, grilled, casserole or fried)	2 tablespoons, 2 slices or 1 steak	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
e)	Pork or lamb (roast, grilled, casserole or fried)	2 tablespoons, 2 slices or 1 chop	1	2	3	4	5+	R	M	1	2	3	4	5	6	7

		Measure	Measures per day					Number of days per week								
f)	Chicken or turkey (roast, grilled, casseroled or fried)	1 wing or thigh, 1/2 breast or 2 slices	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
g)	Bacon or gammon	1 medium slice	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
h)	Liver, liver sausage or liver pate	1 serving	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
i)	Haggis or black pudding	2 tablespoons or 1 slice	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
j)	Meat or chicken pies, pasties or sausage roll	1 individual pie or 1 roll	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
k)	Cold meats (e.g. ham, corned beef, chicken roll)	1 slice	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
l)	Salami or continental sausage	1 slice	1	2	3	4	5+	R	M	1	2	3	4	5	6	7

8. Fish

	Measure	Measures per day					Number of days per week									
a)	Fish fingers	1 finger	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
b)	White fish (e.g. haddock, cod, plaice or scampi) fried or cooked in batter	1 small fillet or 1 serving	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
c)	Grilled, poached or baked white fish	1 small fillet	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
d)	Smoked white fish	1 small fillet	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
e)	Fish cakes, fish pie	1 cake or 2 tablespoons	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
f)	Fried oily fish (e.g. salmon, herring, fresh tuna or mackerel)	1 small fillet	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
g)	Grilled, poached or baked oily fish	1 small fillet	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
h)	Smoked oily fish (kipper, mackerel or salmon)	1 small fillet or 1 slice	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
i)	Tinned salmon	1 tablespoon	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
j)	Tinned tuna	1 tablespoon	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
k)	Sardines, pilchards or rollmop herrings	2 small fish or 1 large fish	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
l)	Prawns, crab etc.	1 tablespoon	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
m)	Mussels, oysters, cockles, scallops	1 tablespoon	1	2	3	4	5+	R	M	1	2	3	4	5	6	7

9. Potatoes, Rice and Pasta

	Measure	Measures per day					Number of days per week								
a) Boiled or baked potatoes	1 medium or 1/2 large	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
b) Mashed potatoes	1 tablespoon	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
c) Oven chips or potato waffles	1/4 plate or 1 waffle	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
d) Home-cooked chips	1/4 plate	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
e) Chips from a chip shop or restaurant	1/4 plate	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
f) Roast or fried potatoes	1/4 plate	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
g) White rice	1 tablespoon	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
h) Brown rice	1 tablespoon	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
i) Pasta (all types) or couscous	1/4 plate	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
j) Noodles (all types)	1/4 plate or 1 pot	1	2	3	4	5+	R	M	1	2	3	4	5	6	7

10. Savoury foods, Soups and Sauces

	Measure	Measures per day					Number of days per week								
a) Pizza	1 slice or 1/2 a small pizza	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
b) Quiche or savoury flan	1 slice	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
c) Savoury pancakes	1 pancake	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
d) Baked beans	1 tablespoon	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
e) Nut roast, nut burgers or vegetable burgers	1 slice or burger	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
f) Quorn products (all types)	1 tablespoon, slice or sausage	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
g) Soya beans, TVP, Tofu or soya meat substitute	1 tablespoon or 1 sausage	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
h) Other beans (kidney, butter, chick peas)	1 tablespoon	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
i) Lentils (excluding soup)	1 tablespoon	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
j) Soups (home-made)	1 small bowl	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
k) Soups (tinned)	1 small bowl	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
l) Soups (dried or instant)	1 small bowl or mug	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
m) Gravy	1 tablespoon	1	2	3	4	5+	R	M	1	2	3	4	5	6	7

		Measure	Measures per day					Number of days per week								
n)	Tomato -based sauces (e.g. for pasta)	1 tablespoon	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
o)	Other savoury sauces (white, cheese etc.)	1 tablespoon	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
p)	Bottled sauces (e.g. ketchup)	1/2 tablespoon	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
q)	Mayonnaise or salad cream	1 teaspoon	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
r)	Oil & vinegar dressing	1 teaspoon	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
s)	Pickled vegetables or chutneys	1 teaspoon or 1 pickle	1	2	3	4	5+	R	M	1	2	3	4	5	6	7

11. Vegetables (including fresh, frozen and tinned vegetables)

		Measure	Measures per day					Number of days per week								
a)	Mixed vegetable dishes (e.g. stir-fry, curry or bake)	1 tablespoon	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
b)	Tinned vegetables (all kinds)	1 tablespoon	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
c)	Peas or green beans	1 tablespoon	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
d)	Carrots	1 tablespoon	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
e)	Cabbage (all kinds)	1 tablespoon	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
f)	Brussels sprouts	1 tablespoon	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
g)	Broccoli	1 tablespoon	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
h)	Spinach or spring greens	1 tablespoon	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
i)	Leeks or courgettes	1 tablespoon	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
j)	Cauliflower, swede (neeps) or turnip	1 tablespoon	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
k)	Sweetcorn	1 tablespoon or 1 piece	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
l)	Onions	1 tablespoon or 1/2 onion	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
m)	Tomatoes	1/2 medium or 2 small	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
n)	Sweet peppers	1/4 pepper	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
o)	Other salad vegetables (lettuce, cucumber etc)	2 leaves or 4 slices	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
p)	Potato salad	1 tablespoon	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
q)	Coleslaw or other veg. salads in dressing	1 tablespoon	1	2	3	4	5+	R	M	1	2	3	4	5	6	7

12. Fruit (including fresh, cooked, frozen and tinned fruits)

	Measure	Measures per day					Number of days per week									
a) Fresh fruit salad	1 tablespoon	1	2	3	4	5+	R	M	1	2	3	4	5	6	7	
b) Tinned fruit (all kinds)	1 tablespoon	1	2	3	4	5+	R	M	1	2	3	4	5	6	7	
c) Apples	1 fruit	1	2	3	4	5+	R	M	1	2	3	4	5	6	7	
d) Bananas	1 fruit	1	2	3	4	5+	R	M	1	2	3	4	5	6	7	
e) Oranges, satsumas or grapefruit	1 small or 1/2 large fruit	1	2	3	4	5+	R	M	1	2	3	4	5	6	7	
f) Pears	1 fruit	1	2	3	4	5+	R	M	1	2	3	4	5	6	7	
g) Peaches or nectarines	1 fruit	1	2	3	4	5+	R	M	1	2	3	4	5	6	7	
h) Kiwi fruit	1 fruit	1	2	3	4	5+	R	M	1	2	3	4	5	6	7	
i) Dried fruit (e.g. raisins, dates or figs)	1 tablespoon or 1 oz (25g)	1	2	3	4	5+	R	M	1	2	3	4	5	6	7	
j) All other fruits (grapes, strawberries, melon etc)	1 tablespoon or 1 slice	1	2	3	4	5+	R	M	1	2	3	4	5	6	7	

13. Puddings

	Measure	Measures per day					Number of days per week								
a) Milk-based puddings (e.g. rice, semolina)	1 small bowl	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
b) Sponge puddings (e.g. steamed, syrup, jam)	1 small bowl	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
c) Gateau or cheesecake	1 slice	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
d) Fruit-based puddings (e.g. pie, tart, crumble)	1 pie, 1 slice or 2 tablespoons	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
e) Mousse, blancmange, trifle, meringue	2 tablespoons or 1 meringue	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
f) Custard or other sweet sauces	2 tablespoons	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
g) Wrapped ice creams (Cornetto, Solero, Magnum etc.)	1 ice cream	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
h) Other ice cream (all flavours)	1 scoop or small tub	1	2	3	4	5+	R	M	1	2	3	4	5	6	7

14. Chocolates, Sweets, Nuts and Crisps

	Measure	Measures per day					Number of days per week								
a) Chocolate bars (e.g. Mars, Dairy Milk)	1 bar or 2 oz. (50g)	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
b) Chocolate sweets, toffees or fudge	2 sweets	1	2	3	4	5+	R	M	1	2	3	4	5	6	7

	Measure	Measures per day					Number of days per week								
c) Boiled sweets, mints	2 sweets	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
d) Fruit gums, pastilles, jellies or chewy sweets	2 sweets	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
e) Salted nuts (peanuts, cashews etc.)	1 small packet or 1 oz. (25g)	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
f) Unsalted nuts	1 small packet or 1 oz. (25g)	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
g) Crisps	1 small bag (25g)	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
h) Reduced fat crisps	1 small bag (25g)	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
i) Other savoury snacks (Quavers, tortilla chips, popcorn etc.)	1 small bag	1	2	3	4	5+	R	M	1	2	3	4	5	6	7

15. Biscuits

	Measure	Measures per day					Number of days per week								
a) Plain (e.g. Rich Tea, digestive)	1 biscuit	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
b) Sweet (e.g. ginger, custard creams)	1 biscuit	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
c) Shortbread	1 biscuit	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
d) Chocolate coated biscuits	1 biscuit	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
e) Savoury biscuits, (crackers, crispbreads)	1 biscuit	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
f) Oatcakes	1 biscuit	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
g) Cereal bars, flapjacks	1 bar or slice	1	2	3	4	5+	R	M	1	2	3	4	5	6	7

16. Cakes

	Measure	Measures per day					Number of days per week								
a) Plain cakes (sponge, madeira, ginger etc.)	1 medium slice	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
b) Sponge cakes with jam, cream or icing	1 medium slice	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
c) Fruit cakes (all kinds)	1 medium slice	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
d) Pastries, doughnuts or muffins	1 piece	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
e) Pancakes or scones	1 pancake or scone	1	2	3	4	5+	R	M	1	2	3	4	5	6	7

17. Spreads and Sugar

	Measure	Measures per day	Number of days per week
a) Jam, honey, or marmalade	1 teaspoon	1 2 3 4 5+	R M 1 2 3 4 5 6 7
b) Yeast or meat extract (Marmite, Bovril etc.)	1/2 teaspoon	1 2 3 4 5+	R M 1 2 3 4 5 6 7
c) Peanut butter or chocolate spread	1 teaspoon	1 2 3 4 5+	R M 1 2 3 4 5 6 7
d) How many teaspoons of table sugar did you use each day in drinks and on cereals or deserts? (If you did not use any table sugar, please enter 0).			<input type="text"/> <input type="text"/>
e) Did you use any butter, margarine or other fat spread or oil on bread?		Yes <input type="checkbox"/> No <input type="checkbox"/>	
If yes, please give full details of the one or two types you used most (e.g. Asda Sunflower buttery spread). If you did not spread any fat or oil on bread, please go straight on to question g.			
_____			Office Code <input type="text"/> <input type="text"/>
_____			Office Code <input type="text"/> <input type="text"/>
f) How much did you normally spread on one slice of bread? (Please tick one answer). (an example of a thin layer is shown in the photograph on the front cover).			
a scrape <input type="checkbox"/>	a thin layer <input type="checkbox"/>	a thick layer <input type="checkbox"/>	
g) Did you use any fat or oil for home frying or cooking?		Yes <input type="checkbox"/> No <input type="checkbox"/>	
If yes, please give full details of the one or two types you used most (e.g. Tesco Pure Vegetable Oil). If you did not use any fat or oil for home frying or cooking, please go straight on to section 18.			
_____			Office Code <input type="text"/> <input type="text"/>
_____			Office Code <input type="text"/> <input type="text"/>

18. Beverages and Soft Drinks

	Measure	Measures per day	Number of days per week
a) Tea (regular)	1 cup or mug	1 2 3 4 5+	R M 1 2 3 4 5 6 7
b) Herbal, fruit or decaffeinated tea	1 cup or mug	1 2 3 4 5+	R M 1 2 3 4 5 6 7
c) Instant coffee (regular)	1 cup or mug	1 2 3 4 5+	R M 1 2 3 4 5 6 7
d) Decaffeinated coffee	1 cup or mug	1 2 3 4 5+	R M 1 2 3 4 5 6 7
e) Filter, espresso or cappuccino coffee	1 cup or mug	1 2 3 4 5+	R M 1 2 3 4 5 6 7

--	--	--	--	--	--

	Measure	Measures per day					Number of days per week								
f) Pure fruit juice (orange, apple, etc.)	1/2 medium glass	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
g) Tomato juice	1/2 medium glass	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
h) Blackcurrant squash (e.g. Ribena)	1 medium glass	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
i) Other fruit squash	1 medium glass	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
j) Diet fizzy drinks (Cola, lemonade etc.)	1 can	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
k) Regular fizzy drinks	1 can	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
l) Mineral water	1 medium glass	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
m) Tap water (not in other drinks)	1 medium glass	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
n) Hot chocolate	1 cup or mug	1	2	3	4	5+	R	M	1	2	3	4	5	6	7
o) Horlicks or Ovaltine	1 cup or mug	1	2	3	4	5+	R	M	1	2	3	4	5	6	7

19. Alcoholic Drinks

Please estimate your average intake of alcohol over the last 2-3 months. If your intake varied from week to week, please try to give an overall estimate which allows for weeks with high or low intake. If you had less than one measure a week on average, please circle 0.

Drink	Measure	Number of measures per week								
a) Low alcohol lager or beer	1/2 pint	0	1-2	3-4	5-9	10-14	15-19	20-29	30-39	40+
b) Dark beer (Export, bitter or stout)	1/2 pint	0	1-2	3-4	5-9	10-14	15-19	20-29	30-39	40+
c) Light beer (lager or continental beers)	1/2 pint	0	1-2	3-4	5-9	10-14	15-19	20-29	30-39	40+
d) White wine	1 wine glass	0	1-2	3-4	5-9	10-14	15-19	20-29	30-39	40+
e) Red wine	1 wine glass	0	1-2	3-4	5-9	10-14	15-19	20-29	30-39	40+
f) Sherry, port etc.	1 sherry glass	0	1-2	3-4	5-9	10-14	15-19	20-29	30-39	40+
g) Spirits or liqueurs	1 pub measure	0	1-2	3-4	5-9	10-14	15-19	20-29	30-39	40+
h) Alcopops (e.g. Bacardi Breezer)	1 bottle	0	1-2	3-4	5-9	10-14	15-19	20-29	30-39	40+
i) Cider	1 bottle or 1/2 pint	0	1-2	3-4	5-9	10-14	15-19	20-29	30-39	40+

20. Other Foods and Drinks

Please enter details of any foods or drinks which you had **more than once a week** in the last 2-3 months which you have not included in the questionnaire above. If you do not want to add any foods, please leave this section blank and go to section 21.

Food description	Measure	Measures per day	Number of days per week
a) _____ _____	_____	1 2 3 4 5+	1 2 3 4 5 6 7
b) _____ _____	_____	1 2 3 4 5+	1 2 3 4 5 6 7
c) _____ _____	_____	1 2 3 4 5+	1 2 3 4 5 6 7
d) _____ _____	_____	1 2 3 4 5+	1 2 3 4 5 6 7

21. Vitamin, Mineral and Food Supplements

Please give details and brand name of any supplements (e.g. multivitamins, iron tablets, cod liver oil, evening primrose oil, Complan, wheatgerm, bran) which you took in the last 2-3 months.

Supplement type	Measure	Measures per day	Number of days per week
a) _____ Brand name and details _____	_____	1 2 3 4 5+	R M 1 2 3 4 5 6 7
b) _____ Brand name and details _____	_____	1 2 3 4 5+	R M 1 2 3 4 5 6 7
c) _____ Brand name and details _____	_____	1 2 3 4 5+	R M 1 2 3 4 5 6 7
d) _____ Brand name and details _____	_____	1 2 3 4 5+	R M 1 2 3 4 5 6 7

22. Other Information

Any other information or comments on your diet in the last 2-3 months

Date of completing the questionnaire _____

Thank-you very much for completing this questionnaire.

Please return it to the investigators as requested.